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ENGINEERING DESIGN HANDBOOK

TABLES OF THE CUMULATIVE BINOMIAL PROBABILITIES

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ENGINEERING DESIGN HANDBOOK

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FOREWORD

The Binomial Distribution and the Incomplete Beta-Function Ratio (or Pearson Type I distribution) are probability distributions which are of great importance in both the theory of probability and in its applications.

The binomial probabilities which are generated from $(q + p)^n$, where n is an integer and $q + p = 1$, constitute a discrete probability distribution which has very wide application. The Incomplete Beta-Function Ratio, defined by

$$\int_0^x p^{c-1} (1-p)^{n-c} dp \int_0^1 p^{c-1} (1-p)^{n-c} dp = \frac{\beta_x(c, n-c+1)}{\beta(c, n-c+1)} = I_x(c, n-c+1)$$

which has been tabulated by Pearson¹ is continuous. Nevertheless, precise values of one distribution can be derived directly from the other by means of the simple identities

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r q^{n-r} = I_p(c, n-c+1)$$

$$1 - P(c+1, n, p) = \sum_{r=0}^c \binom{n}{r} p^r q^{n-r} = I_{1-p}(n-c+1, c)$$

$$= 1 - I_p(c+1, n-c)$$

Since the transition from the binomial distribution to the Incomplete Beta-Function requires only a simple change in parameters, which function one should tabulate is theoretically unimportant. The choice, however, is one of considerable practical importance. The *Tables of the Incomplete Beta-Function*¹ are so arranged that in many applied problems a great deal of page turning is required to extract the needed probabilities. It is believed that the tabulation of the binomial distribution in the format of the following tables is favored by many applied statisticians, especially in view of the widespread use of binomial probabilities in industrial and Government problems, in sampling inspection, and in statistical analyses generally. Indeed, the format used herein will in many practical problems effect a saving in time and provide some convenience in searching for the required probabilities.

These tables arose from computations related to the solution of some military problems during the late 1940's and early 1950's at the Ballistic Research Laboratories of the Ordnance Corps, U.S. Army, Aberdeen Proving Ground, Maryland. Only the cumulative binomial probability for single

*This pamphlet replaces AMCP 706-109, *Tables of the Cumulative Binomial Probabilities*, January 1971.

¹Superscript numbers refer to References listed on p. xxxii.

chances of 0.5 or less is tabulated. The Introduction points out transitions for obtaining the probability values for the upper half of the range (0.5 to 1.0) from the tabulated values of the lower half.

The computation of the tables was originally suggested by and carried out in collaboration with Dr. Frank E. Grubbs; the tabulation was done on IBM Relay Calculators at the Ballistic Research Laboratories during 1952. Valuable contributions were made to the work by Dr. Max Lotkin and others of the Computing Laboratory of the Ballistic Research Laboratories. In order to make the tables generally available to the scientific community, arrangements were made for the publication of the tables in an economical way through the Government Printing Office in 1953.

In the past year, copies of the tables have become unavailable. For this reason, the tables were made a part of the Engineering Design Handbook Series, and additional copies (with corrections) were printed. Hence, it appeared desirable to prepare a new Introduction that would be more up-to-date in applications. The work on the draft of the new Introduction was borne largely by Professor William C. Guenther of the University of Wyoming. It is hoped that the new printing, therefore, will serve wider purposes. Those contributing to this revision are: Frank E. Grubbs, William C. Guenther, Leslie E. Simon, and Helen J. Coon.

The Engineering Design Handbooks fall into two basic categories, those approved for release and sale, and those classified for security reasons. The Army Materiel Command policy is to release these Engineering Design Handbooks to other DOD activities and their contractors and other Government agencies in accordance with current Army Regulation 70-31, dated 9 September 1966. It will be noted that the majority of these Handbooks can be obtained from the National Technical Information Service (NTIS). Procedures for acquiring these Handbooks follow:

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1. INTRODUCTION

The binomial probability distribution is of considerable importance in both the theory of probability and its applications. It is the appropriate model to use in computing probabilities for a series of events or trials, or for any experiment which has the following properties:

- (a) The result of each trial can be classified into one of two categories, e.g., success or failure, "good" or "defective", conforming or nonconforming.
 - (b) The probability p of a success is the same for each trial.
 - (c) Each trial is independent of all the others in the probability sense.
 - (d) The number of trials is fixed at, say, n .
- (1-1)

Such a series of events is generated by tossing an unbiased coin 5 times and regarding the occurrence of a head as a success ($p = 1/2$), or by rolling an unbiased die 10 times and regarding the occurrence of a six as a success ($p = 1/6$), etc. In either case, it is easy to verify that Conditions 1-1 are satisfied. In a number of situations in which one desires to use the binomial distribution, there may be some doubt that conditions (b) and (c) are really met. Frequently in such cases, however, the experimenter can control certain factors in the performance of the series of experiments which make the Binomial Conditions 1-1 realistic in practical situations (as illustrated in Examples 1-1, 1-2, and 1-3).

In the die example, the same die should be rolled each time. Exactly the same procedure or type of trial is carried out ten times. Each roll and, in general, each repetition is referred to as a "trial" of the experiment. The same terminology is used if ten dice (all unbiased) are thrown simultaneously. That is, each die rolled is called a trial of the experiment even though ten different (but equivalent) "trials" have been performed. Thus, each trial is either a separate occurrence or a repetition in the same experiment. The kind of trials with which we are concerned here should satisfy Conditions 1-1.

Suppose that an experiment consisting of n trials satisfying Conditions 1-1 is performed and let X be the (random) number of successes obtained in the n trials. In most textbooks on probability, it is shown that the probability that $X = x$ is

$$b(x, n, p) = \binom{n}{x} p^x (1 - p)^{n - x}, x = 0, 1, 2, \dots, n \quad (1-2)$$

The name binomial arises from the fact that $b(x, n, p)$ is a term in the expansion of the binomial $(q + p)^n$ or $[(1 - p) + p]^n$ where $q = 1 - p$. In most applications we need a sum of terms rather than an individual term given by Eq. 1-2. The accompanying table gives the right-hand sum

$$\left. \begin{aligned} P(c, n, p) &= \sum_{x=c}^n b(x, n, p) \\ &= \Pr(X \geq c) \\ &= \Pr(c \text{ or more successes in } n \text{ trials}) \end{aligned} \right\} \quad (1-3)$$

to seven decimal places for $n = 1(1)150$, $p = .01(.01).50$ and also for $p = .001(.001).010$.

We also define the left-hand sum

$$\left. \begin{aligned} B(c, n, p) &= \sum_{x=0}^c b(x, n, p) \\ &= \Pr(X \leq c) \end{aligned} \right\} \quad (1-4)$$

Since the sum of the individual probabilities in a probability distribution must sum to unity, we have

$$B(c, n, p) = 1 - P(c + 1, n, p) \quad (1-5)$$

The individual terms given by Eq. 1-2 are obtained by subtraction of successive tabled values. Thus,

$$b(c, n, p) = P(c, n, p) - P(c + 1, n, p) \quad (1-6)$$

It is unnecessary to tabulate sums for $p > .50$. When a $p > .50$ is encountered, one may interchange the role of p and $1 - p$, i.e., success and failure, and the desired sum may be obtained from the accompanying tables for $p \leq .50$. The result is intuitively obvious but may be proved algebraically. In Eq. 1-3 let $x = n - y$, which leads to

$$P(c, n, p) = \sum_{y=0}^{n-c} b(y, n, 1-p) = B(n - c, n, 1 - p) \quad (1-7)$$

Similarly, Eq. 1-4 yields

$$B(c, n, p) = P(n - c, n, 1 - p) \quad (1-8)$$

Some examples on the use of the tables follow.

Example 1-1

In a 25-question, 5-answer multiple-choice examination, what is the probability of getting 6 or more correct answers by (randomly) guessing? Exactly 6 correct answers? No more than 8 correct answers?

Solutions

We observe that

- (a) Assuming that all the questions are answered, then each question answered is either right or wrong.
- (b) For each question the probability of a correct guess is $p = 1/5 = .20$.
- (c) When each answer is a guess, presumably the answer to any one question does not influence the answer to any other question. (In many multiple choice type examinations there may be real doubt as to whether the independence condition is satisfied. Undoubtedly, an appropriate examination should be planned and constructed so as to make this condition seem as realistic as possible.)
- (d) The examination contains 25 questions.

Thus, the binomial probability distribution is appropriate for application here with $n = 25$ and $p = .20$. Letting X be the number of correct answers, we find from the tables

$$Pr(X \geq 6) = P(6, 25, .20) = .3833106$$

$$Pr(X = 6) = Pr(X \geq 6) - Pr(X \geq 7) = P(6, 25, .20) - P(7, 25, .20) \\ = .3833106 - .2199647 = .1633459$$

$$Pr(X \leq 8) = 1 - Pr(X \geq 9) = 1 - P(9, 25, .20) = 1 - .0467742 = .9532258$$

Example 1-2

Suppose that a machine produces items, 8 percent of which are defective. If a random sample of 40 items is inspected, what is the probability that 5 or more of the 40 items are defective?

Solution

Checking the Binomial Conditions 1-1, we observe that

- (a) Each item can be classified as a defective or nondefective.
- (b) Provided the machine remains in good condition, it is reasonable to assume that p , the probability that an item is defective, remains constant from item to item, at least for some suitably short interval of production.
- (c) If the machine is inclined to produce several poor items in succession, then the independence condition will not be satisfied. Therefore, in an attempt to make both (b) and (c) realistic, one might select the sample "at random" from some accumulation of items produced by the machine.
- (d) The experiment consists of "trials" of inspecting one item at a time until 40 items have been inspected.

Thus, the binomial distribution seems to be appropriate with $n = 40$ and $p = .08$. Letting X be the number of defectives observed in the sample, we find from the tables

$$Pr(X \geq 5) = P(5, 40, .08) = .2132078$$

Example 1-3

For a certain variety of seed, it is hypothesized that 95 percent will germinate. If 50 seeds are planted, what is the probability that 45 or less germinate?

Solution

Checking the Binomial Conditions 1-1 we observe that

- (a) A seed either germinates or it does not.
- (b) If the seeds are selected at random from those seeds of the given type, it is not unreasonable to assume that p , the probability that a seed germinates, is .95 for each seed in the sample.
- (c) It is reasonable to assume that seeds germinate independently of one another.
- (d) The number of trials for the experiment is $n = 50$.

Thus, the binomial distribution seems to be appropriate with $n = 50$ and $p = .95$. Letting X be the number of seeds that actually germinate in a sample of size 50, we want $Pr(X \leq 45) = B(45, 50, .95) = 1 - P(46, 50, .95)$. Since $p = .95$ is not an entry in the table, we consider Y , the number of seeds in the sample that do not germinate. Now $p = .05$ and $X \leq 45$ corresponds to $Y \geq 5$. Hence, the desired probability is

$$Pr(Y \geq 5) = P(5, 50, .05) = .1036168$$

It is noted that substitution in Eq. 1-8 also yields the correct result.

The following table might provide a useful summary:

For the probability of	When $p \leq .5$, look up	When $p \geq .5$, look up
At least c successes	$P(c, n, p)$	$1 - P(n - c + 1, n, 1 - p)$
Less than c successes ($c - 1$ or less successes)	$1 - P(c, n, p)$	$P(n - c + 1, n, 1 - p)$
c or less successes	$1 - P(c + 1, n, p)$	$P(n - c, n, 1 - p)$
Less than $n - c + 1$ failures	$P(c, n, p)$	$1 - P(n - c + 1, n, 1 - p)$
At least $n - c + 1$ failures	$1 - P(c, n, p)$	$P(n - c + 1, n, 1 - p)$
Exactly c successes	$P(c, n, p)$ $- P(c + 1, n, p)$	$P(n - c, n, 1 - p)$ $- P(n - c + 1, n, 1 - p)$

2. RELATIONSHIP BETWEEN BINOMIAL PROBABILITY SUMS AND THE INCOMPLETE BETA-FUNCTION

The Incomplete Beta-Function Ratio, $I_p(A, B)$, Pearson,¹ Harter,² is defined by

$$I_p(A, B) = \int_0^p \frac{1}{\beta(A, B)} u^{A-1} (1-u)^{B-1} du \quad 0 \leq u \leq 1 \quad A, B > 0 \quad (2-1)$$

where $\beta(A, B)$ is the complete beta function of A and B , and $\beta(A, B) = \Gamma(A)\Gamma(B)/\Gamma(A+B)$. By repeated integration by parts it is easily shown that if A and B are integers, then

$$I_p(A, B) = P(A, A+B-1, p) \quad (2-2)$$

Equivalently, we have

$$I_p(c, n-c+1) = P(c, n, p) \quad (2-3)$$

which is the probability of c or more successes in a binomial type experiment. Moreover, the chance of c or less successes in n trials is given by

$$I_{1-p}(n-c+1, c) = 1 - I_p(c, n-c+1) = 1 - P(c, n, p) \quad (2-4)$$

In Table I of the *Tables of the Incomplete Beta-Function*, Pearson¹ has tabulated $I_p(A, B)$ to seven decimal places for all combinations of $p = .01(.01)1.00$, $A = .5(.5)11(1)50$, $B = .5(.5)11(1)50$ and $A \geq B$. (Some additional values are given in his Table III and Table IV.) Thus, for A and B integers every value tabulated by Pearson is available also in this binomial probability table. Since $A+B-1$ has a maximum value of 99 in Pearson's table, then Eq. 2-3 can be evaluated only with n 's up to 99 using his tables.

Sometimes we desire a percentage point for a binomial distribution, i. e., given c , n and α , we seek that p which satisfies either

$$P(c, n, p) = \alpha \quad (2-5)$$

or

$$B(c, n, p) = \alpha \quad (2-6)$$

In a number of practical problems linear interpolation in the binomial probability table for a percentage point will provide sufficient accuracy. If a higher degree of accuracy is desired, one could use any one of several tables. Leone, Haynam, Chu, and Topp³ have tabulated to eight decimal places the p which satisfies Eq. 2-6 for all combinations of $n = 10(5)100$, and $\alpha = .0025, .005, .01, .025, .05, .1, .9, .95, .975, .995, .9975$. In addition, one could use one of several tables of percentage points for the Beta Distribution. For example, Harter² gives to seven decimal places

$$p = X(P, A, B) \quad (2-7)$$

for $A, B = 1(1)40$ and for twenty-three values of P or α . Here p is the solution of the equation

$$I_p(A, B) = P \quad (2-8)$$

and consequently the solution of Eq. 2-5 with $P = \alpha$, $c = A$ and $n - c + 1 = B$. The P or α entries for Harter's table are $P = .0001, .0005, .001, .005, .01, .025, .05, .10, (.10), .50$. If $P > .5$, the one uses $X(P, A, B) = 1 - X(1 - P, B, A)$. Pearson and Hartley,⁴ Vogler,⁵ and Thompson⁶ have also prepared tables of the percentage points of the incomplete beta distributions. The only entries that these tables contain which are not used by Harter are $A = 60, B = 60, P = .25$ and $P = .75$.

As is well known, the percentage points of the binomial distribution, or of the Incomplete Beta-Function Ratio, are equivalent to confidence limits on the true success ratio p , having observed c successes in a fixed sample of size n . For example, the value of p , equal to p_U say, for which

$$B(c, n, p_U) = I_{p_U}(c+1, n-c) = \alpha$$

gives an upper $1 - \alpha$ confidence limit on the true (unknown) p , and the value of p , equal to p_L say, for which

$$P(c, n, p_L) = I_{p_L}(c, n-c+1) = \alpha$$

gives a lower $1 - \alpha$ confidence limit on the true (unknown) p .

The limits p_L and p_U provide, of course, two-sided $1 - 2\alpha$ confidence limits on the true (unknown) p , and in the long run intervals so computed will capture p at least $100(1 - 2\alpha)$ percent of the time.

Thus, the tables of Harter,² Leone, et al.,³ Hartley,⁴ Thompson,⁶ and Vogler⁵ may be used to find various confidence limits on the true unknown p of the binomial distribution.

We remark also in passing that the percentage points for the binomial distribution are also confidence limits on the reliability of a "system" which consists of only one component for an observed number c of successes out of n trials in testing the component or "system".

Example 2-1

If $n = 30$, $c = 10$ and $\alpha = .05$, find solutions for Eqs. 2-5 and 2-6.

Solution

Consider first the equation $P(10, 30, p) = .05$. From the binomial probability tables herewith we read $P(10, 30, .19) = .04508$ and $P(10, 30, .20) = .06109$, from which linear interpolation yields $p = .1931$. To use Harter's table,² we enter with $A = c = 10$, $B = n - c + 1 = 21$, $P = .05$, and read $p = .1933084$. To use the table prepared by the Leone group,³ we convert the equation to $B(9, 30, p) = .95$ and read $p = .19330842$.

For Eq. 2-6, we have $B(10, 30, p) = .05$ and in using the binomial probability tables it is convenient to rewrite the equation as $P(11, 30, p) = .95$. Then $P(11, 30, .49) = .9384$, $P(11, 30, .50) = .9506$ and linear interpolation yields $p = .4995$. From the latter equation we observe that to use Harter's table² we need $A = 11$, $B = 30 - 11 + 1 = 20$, $p = .95$. But $X(.95, 11, 20) = 1 - X(.05, 20, 11) = 1 - .5005613 = .4994387$. From the table prepared by the Leone group³ we read directly using the equation in its original form that $p = .49943869$.

It is interesting to note that since the Snedecor F -distribution (and the Student t -distribution) is related rather easily to the beta distribution, then binomial probability sums are expressible in terms of F -probabilities. By making a transformation in Eq. 2-1, it can be shown that

$$B(c, n, p) = \Pr \left[F(\nu_1, \nu_2) \geq \frac{n-c}{c+1} \frac{p}{1-p} \right] \quad (2-9)$$

where $F(\nu_1, \nu_2)$ follows Snedecor's F -distribution with degrees of freedom, $\nu_1 = 2(c+1)$ and $\nu_2 = 2(n-c)$. Setting Eq. 2-9 equal to α yields

$$F = \frac{(c+1) F_{1-\alpha}(2c+2, 2n-2c)}{(n-c) + (c+1) F_{1-\alpha}(2c+2, 2n-2c)} \quad (2-10)$$

where the quantity $F_{1-\alpha}(\nu_1, \nu_2)$ is defined by

$$\Pr\{F(\nu_1, \nu_2) \leq F_{1-\alpha}(\nu_1, \nu_2)\} = 1 - \alpha \quad (2-11)$$

The usefulness of Eq. 2-10 is somewhat restricted by insufficient tabulation of F in terms of particular degrees of freedom needed. However, the percentage points or standard probability levels for the F -distribution are widely available. Nevertheless, it is not difficult to obtain binomial percentage points by previously discussed methods.

3. THE NEGATIVE BINOMIAL DISTRIBUTION

Consider a series of events or trials for which (a), (b), and (c) of Conditions (1-1) are satisfied but condition (d) is replaced by a new condition d':

(d') The series of experiments is performed a variable number of times until a fixed number of successes (or defectives, etc.), say k , is achieved.

Letting Y be the number of trials required to obtain exactly k successes, it is easily shown that the probability that $Y = y$ is

$$b^*(y, k, p) = \binom{y-1}{k-1} p^k (1-p)^{y-k}, \quad y = k, k+1, k+2, \dots \quad (3-1)$$

As in the binomial probability case, we are usually interested in a sum of probabilities such as Eq. 3-1. Denote the left-hand sum by

$$B^*(c, k, p) = \sum_{y=k}^c b^*(y, k, p) = \Pr(Y \leq c) \quad c \geq k \quad (3-2)$$

Then, we can show that

$$B^*(c, k, p) = P(k, c, p) \quad (3-3)$$

In other words

$$\Pr(Y \leq c) = \Pr(X \geq k) \quad (3-4)$$

where Y has a negative binomial distribution with constants k and p , and X has a binomial distribution with constants c and p . To verify the truth of Eq. 3-3, assume that for a series of experiments, (a), (b), and (c) of Conditions 1-1 are satisfied. Suppose we set as a goal the obtaining

of k successes but agree to perform no more than c trials. Then our goal can be achieved in two ways. First, if the k th success is obtained on either the k th, $k + 1$ th, . . . or the c th trial, the goal is accomplished. The probability that this series of events happens is $Pr(Y \leq c)$, i.e., the left-hand side of Eq. 3-3. The second way to achieve the goal in c trials is to perform exactly c trials and obtain k , $k + 1$, . . . , c successes. The probability of the latter series of events is $Pr(X \geq k)$, the right side of Eq. 3-3. In both cases we are considering the event "the goal is achieved in c trials" so that the two probabilities, therefore, must be the same.

If we define the right hand negative binomial sum by

$$P^*(c, k, p) = \sum_{y=c}^{\infty} b^*(y, k, p) = Pr(Y \geq c) \quad (3-5)$$

then we have immediately from Eq. 3-3

$$P^*(c, k, p) = 1 - P(k, c - 1, p) = B(k - 1, c - 1, p) \quad (3-6)$$

Example 3-1

Consider again the situation of Example 1-2. However, suppose now that sampling is continued until 5 defective items are observed. What is the probability that the 5th defective is found on or before the 40th item is sampled?

Solution

We have already discussed (a), (b), and (c) of Conditions 1-1. The new condition (d') obviously applies here. Hence, we want Eq. 3-2 with $k = 5$, $p = .08$, and $c = 40$. We have from Eq. 3-3 and the tables

$$\begin{aligned} B^*(40, 5, .08) &= P(5, 40, .08) \\ &= .2132078 \end{aligned}$$

Example 3-2

To determine who pays for coffee, three people each toss a coin and the odd man pays. If the coins all show heads or all show tails, they are tossed again. What is the probability that a decision is reached in five repetitions or sooner?

Solution

A decision is reached on any given set of tosses if the result is two heads and a tail or two tails and a head. For any given set, the binomial is appropriate, and we identify $n = 3$ and $p = .5$ if a head is considered to be a success. Letting X be the number of heads appearing on the three coins, the probability of a decision is

$$\begin{aligned} &Pr(X = 1) + Pr(X = 2) \\ &= Pr(X \geq 1) - Pr(X \geq 3) = P(1, 3, 0.5) - P(3, 3, 0.5) = .75 \end{aligned}$$

Concerning each set of tosses we observe

- (a) A decision is reached or not reached with each set.
- (b) The probability of a decision is .75 for all sets.
- (c) The result of each set is independent of the result for any other set.
- (d') A variable number of sets is required to produce a decision.

In other words, the negative binomial conditions are satisfied with $p = .75$, $k = 1$. If Y is the number of trials required to produce one success (a decision), we want

$$Pr(Y \leq 5) = B^*(5, 1, .75) = P(1, 5, .75)$$

Using first Eq. 1-7 then Eq. 1-5 yields

$$\begin{aligned} P(1, 5, .75) &= B(4, 5, .25) = 1 - P(5, 5, .25) \\ &= 1 - .0009766 = .9990234 \end{aligned}$$

If we let Z denote the total number of failures obtained before the k th success is achieved, then $Z + k = Y$. Making this change in Eq. 3-1 yields the alternative form

$$b^*(z, k, p) = \binom{z+k-1}{k-1} p^k (1-p)^z, \quad z = 0, 1, 2, \dots \quad (3-7)$$

In some interesting applications (not arising in the context we have used), k is not an integer. Then Eq. 3-7 is usually written as

$$b^*(z, k, p) = \frac{\Gamma(z+k)}{z! \Gamma(k)} p^k (1-p)^z, \quad z = 0, 1, 2, \dots \quad (3-8)$$

Now, of course, Eq. 3-3 no longer applies, and special tables are required to evaluate probabilities. Williamson and Bretherton⁷ have prepared a table giving

$$F(n) = Pr(Z \leq n) = \sum_{z=0}^n b^*(z, k, p)$$

to six decimal places for a wide range of p and k . The table seems to be quite adequate for a number of practical problems. For integer-valued k , the binomial tables are superior because of the fact that many more entries are available.

4. BINOMIAL APPROXIMATION TO THE HYPERGEOMETRIC DISTRIBUTION

In a number of sampling situations the following conditions are satisfied:

- (a) The drawing is made from a finite population of N items.
- (b) A random sample of size n is selected (drawing without replacement). (4-1)

According to Eq. 4-5

$$P(100,10,5,1) \simeq B(1,5,.10) = 1 - P(2,5,.10)$$

Hence,

$$P(X \geq 2) \simeq P(2,5,.10) = .0814600$$

Here, the actual value obtained from the Lieberman-Owen table is .076857. Of course, a higher degree of accuracy can be obtained with more complicated approximations.

Example 4-2

Approximate $P(60,16,8,4)$.

Solution

According to Eq. 4-5, we have

$$P(60,16,8,4) \simeq B\left(4,8,\frac{16}{60}\right) = 1 - P(5,8,.2667)$$

Linear interpolation in the binomial probability table yields $P(60,16,8,4) \simeq .9641$. In this case, the correct value is .974228.

5. SINGLE SAMPLING BY ATTRIBUTES AND CORRESPONDING TESTS OF HYPOTHESES

Suppose that a sample of n items is selected at random from a lot and inspected, and that each item is classified as defective or nondefective (this is usually referred to as attribute sampling). Sampling is performed so as to make Conditions 1-1 realistic. The binomial distribution is hence appropriate for computing probabilities for very large lots of items. Suppose that it is decided that if the true (unknown) fraction of defective items, say p , produced by the process is acceptably small, say p_0 (or less), then satisfactory quality is being achieved, while for some $p > p_0$ the quality is not considered satisfactory. Of course, in practice p will be unknown as indicated, and inferences will be based upon sampling. In order to make a decision we will observe X , the number of defective items in a random sample of size n , and conclude that the product is unsatisfactory if the observed value of X , say x , is too large.

Sometimes the sample size n , the acceptable quality level p_0 , and a small probability α_0 (frequently .05 or .01) are specified. Then a rejection number d (so that $c = d - 1$ is called the acceptance number) is determined such that $Pr(X \geq d) \leq \alpha_0$, if $p = p_0$. That is, we require

$$P(d, n, p_0) \leq \alpha_0 \quad (5-1)$$

In other words, if actually $p = p_0$ so that the quality is satisfactory, then we wish to reject the lot with low probability α_0 . Since Eq. 5-1 will not yield a unique solution, we adopt the convention of making d as small as possible. Observation in the binomial table immediately yields the required d . In terms of hypothesis testing we choose between the null and alternative hypotheses

$$H_0: p = p_0 \quad \text{and} \quad H_1: p > p_0$$

selecting the critical region $x \geq d$ so that the power is $\leq \alpha_0$ if $p = p_0$.

Example 5-1

Suppose $n = 20$, $p_0 = .05$ and $\alpha_0 = .05$. Find the rejection number d .

Solution

We seek the smallest d which satisfies $P(d, 20, .05) \leq .05$. The binomial table yields $P(3, 20, .05) = .0754837$ and $P(4, 20, .05) = .0159015$. Hence, we see that $d = 4$ (and $c = 3$).

In sampling inspection practices and in many quality control type problems, it is frequently standard procedure to specify two values of p , say an acceptable level p_0 and an unacceptable level p_1 , where of course $p_0 < p_1$, and to specify two small probabilities α_0 and β_1 . If actually $p = p_0$, then the product is regarded as satisfactory, and under such circumstances we would like to reach the correct conclusion with high probability, say at least $1 - \alpha_0$. On the other hand, if $p = p_1$, then the product quality is unsatisfactory and it is highly desirable that the probability of concluding incorrectly that $p = p_0$ be small, say no more than β_1 . The problem is to determine the sample size n and rejection number d such that both conditions are satisfied. In symbolic form we need

$$\begin{aligned} \Pr(X \geq d) &\leq \alpha_0 & \text{if } p = p_0 \\ \Pr(X \geq d) &\geq 1 - \beta_1 & \text{if } p = p_1 \end{aligned}$$

In terms of binomial probability sums these inequalities are

$$P(d, n, p_0) \leq \alpha_0 \quad (5-2)$$

$$P(d, n, p_1) \geq 1 - \beta_1 \quad (5-3)$$

Usually, the minimum n is desired, although this need not be the case. In terms of hypothesis testing we are choosing between

$$H_0: p = p_0 \quad \text{and} \quad H_1: p = p_1$$

by selecting a critical region $x \geq d$ such that

$$\begin{aligned} \text{Power} &\leq \alpha_0 & \text{if } p = p_0 \\ \text{Power} &\geq 1 - \beta_1 & \text{if } p = p_1 \end{aligned}$$

The small probability $P(d, n, p_0)$ is the so-called "Type I error" or chance of rejecting the null hypothesis H_0 when it is true, and $1 - P(d, n, p_1)$ is the "Type II error" or the chance of accepting H_0 when actually the alternative hypothesis H_1 is true.

If p_0 and p_1 are entries in the binomial table, solutions for Eqs. 5-2 and 5-3 are quickly found by inspection. For a given d , the first inequality determines an integer $n_U(d)$ such that the inequality is satisfied if $n \leq n_U(d)$. Similarly, the second inequality is satisfied if n is large enough, say $n \geq n_L(d)$. If $n_L(d) > n_U(d)$ no solutions exist for the chosen d but if $n_L(d) \leq n_U(d)$, then all n such

that $n_L(d) \leq n \leq n_U(d)$ are solutions. It is easy to verify that as d is increased, both $n_L(d)$ and $n_U(d)$ increase, but the upper bound $n_U(d)$ increases at a faster rate. Hence, if solutions exist for a given value of d , they exist for all larger d . If they do not exist for a given d , then they do not exist for any smaller d . Usually one would start with $d = 1$ and increase d a unit at a time until the desired solution is found. If after a couple of tries it appears that d will be large, then d may be increased several units at a time until the vicinity of the desired solutions is reached.

Example 5-2

If $p_0 = .05$, $p_1 = .20$, $\alpha_0 = .05$, and $\beta_1 = .10$, find the sampling plan with minimum n .

Solution

The inequalities, Eqs. 5-2 and 5-3 are then $P(d, n, .05) \leq .05$ and $P(d, n, .20) \geq .90$. From the table we find that with $d = 1$ we need $n \leq 1$ for the first inequality and $n \geq 11$ for the second. The essential sums from the table are

$$P(1, 1, .05) = .0500000$$

$$P(1, 10, .20) = .8926258$$

$$P(1, 2, .05) = .0975000$$

$$P(1, 11, .20) = .9141007$$

so that with $d = 1$, we need $n \leq 1$ and $n \geq 11$. Obviously, this is impossible so solutions do not exist for $d = 1$. Similarly, we find that with

$$d = 2 \text{ we need } n \leq 7 \text{ and } n \geq 18$$

$$d = 3 \text{ we need } n \leq 16 \text{ and } n \geq 25$$

$$d = 4 \text{ we need } n \leq 28 \text{ and } n \geq 32$$

$$d = 5 \text{ we need } n \leq 40 \text{ and } n \geq 38$$

so that the desired plan is thus $n = 38$ and $d = 5$ ($c = 4$). Obviously, solutions for the inequalities exist for all $d \geq 5$. For example, with $d = 6$, we find $45 \leq n \leq 53$.

Example 5-3

If $p_0 = .10$, $p_1 = .20$, $\alpha_0 = .05$, and $\beta_1 = .05$, find the sampling plan with minimum n .

Solution

The inequalities, Eqs. 5-2 and 5-3, are now $P(d, n, .10) \leq .05$ and $P(d, n, .20) \geq .95$. From the table we see that the first inequality cannot be satisfied with $d = 1$. Also with

$$d = 2 \text{ we need } n \leq 3 \text{ and } n \geq 22$$

$$d = 3 \text{ we need } n \leq 8 \text{ and } n \geq 30$$

$$d = 4 \text{ we need } n \leq 14 \text{ and } n \geq 37$$

$$d = 5 \text{ we need } n \leq 20 \text{ and } n \geq 44$$

Since it appears that it will take a while for the upper bound to reach the lower, we therefore omit some intermediate values of d . We find for

$d = 10$ we need $n \leq 56$ and $n \geq 76$
 $d = 15$ we need $n \leq 94$ and $n \geq 106$
 $d = 19$ we need $n \leq 127$ and $n \geq 129$
 $d = 20$ we need $n \leq 135$ and $n \geq 135$

Hence, the desired solution is $n = 135$ and $d = 20$ ($c = 19$).

When an n larger than the tabled entries is required and the p 's are not too large, we recommend using an approximation given by Hald.⁹ Let $\chi^2(\nu)$ have a Chi-square distribution with ν degrees of freedom and define $\chi^2_\alpha(\nu)$ by

$$Pr[\chi^2(\nu) < \chi^2_\alpha(\nu)] = \alpha$$

Then Hald's result yields

$$\frac{1}{2} \left[\chi^2_{1-p_1} (2c+2) \cdot \left(\frac{1}{p_1} - .5 \right) + c \right] \leq n \leq \frac{1}{2} \left[\chi^2_{\alpha_0} (2c+2) \cdot \left(\frac{1}{p_0} - .5 \right) + c \right] \quad (5-4)$$

To obtain solutions, c is increased until the upper bound exceeds the lower bound and the interval contains at least one integer.

Example 5-4

Use Eq. 5-4 to solve Example 5-3.

Solution

From Eq. 5-4 we have

$$\frac{1}{2} \left[4.5 \chi^2_{.95} (2c+2) + c \right] \leq n \leq \frac{1}{2} \left[9.5 \chi^2_{.05} (2c+2) + c \right]$$

By trial, we find

$$\text{with } c = 18, \quad \frac{(4.5)(53.38) + 18}{2} \leq n \leq \frac{(9.5)(24.88) + 18}{2}$$

or

$$129.11 \leq n \leq 127.18$$

and with $c = 19$,

$$\frac{(4.5)(55.76) + 19}{2} \leq n \leq \frac{(9.5)(26.51) + 19}{2}$$

or

$$134.96 \leq n \leq 135.42$$

Thus, the approximate procedure also yields

$n = 135$ and $c = 19$. Chi-square values were obtained from Harter's² table.

The method illustrated in Examples 5-2 and 5-3 is given in a paper by William C. Guenther, "Use of the Binomial, Hypergeometric and Poisson Tables to Obtain Sampling Plans", *Journal of Quality Technology*, Vol. 1, pp. 105-109, 1969.

In an earlier reference,¹⁰ Grubbs (1949) gave a solution to the problem of finding the single sampling inspection plan, n and c , such that its operating characteristic curve (i. e., one minus power) passes very near two points $(1 - \alpha_0, p_0)$ and (β_1, p_1) for risks of $\alpha_0 = .05$ and $\beta_1 = .10$. In this connection, one has only to find from the $\alpha_0 = .05$ table those sampling inspection plans or various values of n_i and c_i along with p_0 's very near the "desired" p_0 for which $P(c_i, n_i, p_0) \approx .95$, and corresponding plans n_j and c_j with p_1 's near the "undesired" p_1 for which $P(c_j, n_j, p_1) \approx .10$. Then, out of the two sets of plans, there is a common one, n and c , which guarantees the desired risks (very nearly) and for which n is the smallest sample size meeting with the stated conditions.

6. DISTRIBUTION-FREE β -CONTENT TOLERANCE INTERVALS

Let X_1, X_2, \dots, X_n be a random sample from a continuous distribution having unknown density function $f(x) > 0$, where $a < x < b$, and a and b are known. Denote the ordered sample by $X_{(1)}, X_{(2)}, \dots, X_{(n)}$ and let

$$W = Pr(X_{(i)} < X < X_{(j)}) = \int_{X_{(i)}}^{X_{(j)}} f(x) dx \quad i < j.$$

W is thus the fraction of the distribution captured between the i th and j th order statistics. Denoting the observed values of $X_{(i)}$ and $X_{(j)}$ by $x_{(i)}$ and $x_{(j)}$, respectively, we call $(x_{(i)}, x_{(j)})$ a two-sided tolerance interval for the distribution of X . The numbers $x_{(i)}$ and $x_{(j)}$ are usually referred to as the lower and upper tolerance limits, respectively. The intervals $(a, x_{(j)})$ and $(x_{(i)}, b)$ are called one-sided tolerance intervals.

Suppose now that we are given β and γ , two positive numbers less than 1 (but usually close to 1). If i and j are determined so that

$$Pr(W \geq \beta) = Pr\left[\int_{X_{(i)}}^{X_{(j)}} f(x) dx \geq \beta\right] \geq \gamma \quad (6-1)$$

then $(x_{(i)}, x_{(j)})$ is called a β -content tolerance interval. It can be shown that Eq. 6-1 can be expressed as

$$P(n - j + i + 1, n, 1 - \beta) \geq \gamma, \quad (6-2)$$

a formula which also holds for the one-sided cases if we agree to set $i = 0$ when seeking only an upper tolerance limit and to set $j = n + 1$ when seeking only a lower tolerance limit. Since $Pr(W \geq \beta)$ does not depend upon $f(x)$, the tolerance intervals are "distribution free".

Sometimes (as with sampling plans and hypothesis testing) four constants $\beta_0 < \beta_1$, and $\gamma_0 > \gamma_1$ are given. It is then desired to obtain i and j so that

$$Pr(W \geq \beta_0) \geq \gamma_0 \quad (6-3)$$

and

$$Pr(W \geq \beta_1) \leq \gamma_1 \quad (6-4)$$

In descriptive terms, it is desired that the tolerance interval should be long enough to capture (with high probability) at least a given proportion of the distribution, but also that it should not be unnecessarily long. The second condition is met by requiring the interval to capture a large proportion β_1 of the distribution with low probability γ_1 . We can replace Eqs. 6-3 and 6-4 by

$$P(n - j + i + 1, n, 1 - \beta_0) \geq \gamma_0 \quad (6-5)$$

and

$$P(n - j + i + 1, n, 1 - \beta_1) \leq \gamma_1 \quad (6-6)$$

The three main problems considered with distribution-free β -content tolerance intervals are: (1) Given n , β , and γ , find i and j (one-sided cases), or $j - i$ (two-sided case) so that Eq. 6-2 is satisfied, and $Pr(W \geq \beta)$ is as close to γ as possible. (2) Given i , j , β , and γ , find the minimum n which satisfies Eq. 6-2. (3) Given β_0 , β_1 , γ_0 , and γ_1 , find the minimum n and accompanying i , j , or $j - i$ which satisfies both Eq. 6-3 and Eq. 6-4. Although various tabulations for these problems have appeared in the literature, all three can be solved by inspection with the probability table.

Example 6-1

If $\beta = .90$, $\gamma = .95$, and $n = 50$, find the distribution-free one-sided and two-sided β -content tolerance intervals with $Pr(W \geq .90) \geq .95$ being as nearly satisfied as possible. If $\beta = .90$, $\gamma = .95$, $i = 1$, and $j = n - 1$, find the distribution-free one-sided and two-sided β -content tolerance intervals with minimum sample size.

Solution

For the first problem, Eq. 6-2 yields for each of the three cases

$$P(i, 50, .10) \geq .95, P(51 - j, 50, .10) \geq .95, \text{ and } P(51 - j + i, 50, .10) \geq .95.$$

By inspection we find $i = 2$, $51 - j = 2$ or $j = 49$, and $51 - (j - i) = 2$ or $j - i = 49$. Then, for the one-sided cases the desired intervals are $(x_{(2)}, \infty)$ and $(-\infty, x_{(49)})$. For the two sided case we have $(x_{(1)}, x_{(50)})$.

For the second problem, Eq. 6-2 gives

$$P(1, n, .10) \geq .95, P(2, n, .10) \geq .95 \text{ and } P(3, n, .10) \geq .95.$$

By observation in the table we find that to satisfy the inequalities we must have $n > 29$, $n \geq 46$, and $n \geq 61$, respectively. Then, the desired intervals are $(x_{(1)}, \infty)$ obtained with $n = 29$, $(-\infty, x_{(45)})$ obtained with $n = 46$, and $(x_{(1)}, x_{(60)})$ obtained with $n = 61$.

Example 6-2

If $\beta_0 = .90$, $\beta_1 = .99$, $\gamma_0 = .95$, and $\gamma_1 = .05$, find the distribution-free one-sided and two-sided β_0 -content tolerance interval with minimum n .

Solution

Consider the two-sided case. Eqs. 6-5 and 6-6 are then

$$P(n - j + i + 1, n, .10) \geq .95$$

$$\text{and } P(n - j + i + 1, n, .01) \leq .05$$

The solution is obtained by trial, starting with $n - j + i + 1 = 1$ and increasing this quantity until a solution is found. With $n - j + i + 1 = 1$, we find by observation from the table that we must have $n \geq 29$ and $n \leq 5$ to satisfy the two inequalities so that no solution is possible. With $n - j + i + 1 = 2$,

we need $n \geq 46$ and $n \leq 35$, again an impossibility. With $n - j + i + 1 = 3$ we need $n \geq 61$ and $n \leq 82$. The desired n is thus 61 and $j - i = 59$. The tolerance interval can be either $(x_{(2)}, x_{(61)})$ or $(x_{(1)}, x_{(60)})$.

With a lower tolerance limit we need $i = 3$ and $n = 61$, the tolerance interval being $(x_{(3)}, \infty)$. With an upper tolerance limit, we need $n - j + i + 1 = 3$, $n = 61$, and $j = 59$, so that the interval is $(-\infty, x_{(59)})$.

The material of this paragraph is taken from "Determination of Sample Size for Distribution-Free Tolerance Limits", William C. Guenther, *The American Statistician*, Vol. 24, 1970, pp. 44-46.

7. DOUBLE SAMPLING PLANS WITH TWO CONDITIONS ON POWER (OR OC)*

In par. 5, we considered single sampling plans which satisfied the two conditions

$$\left. \begin{array}{ll} \text{Power} \leq \alpha_0 & \text{if } p = p_0 \\ \text{Power} \geq 1 - \beta_1 & \text{if } p = p_1 > p_0 \end{array} \right\} \quad (7-1)$$

and observed that in the equivalent hypothesis testing problem we choose between

$$H_0: p = p_0 \quad \text{and} \quad H_1: p = p_1$$

Now we discuss the determination of double sampling plans which satisfy the same two requirements. The type of double sampling scheme which we consider here requires two sample sizes n_1 and n_2 , and two rejection numbers d_1 and d_2 (or two acceptance numbers $c_1 = d_1 - 1$ and $c_2 = d_2 - 1$). The procedure begins by inspecting a sample of size n_1 items and counting the number of defectives (or successes), say X_1 . If $x_1 \leq c_1$, where x_1 is the observed value of X_1 , we accept on the basis of the one initial sample. Similarly, if $x_1 > c_2$, we reject without taking a second sample. However, if $c_1 < x_1 \leq c_2$, a second sample of size n_2 is taken and the number of defectives X_2 observed in the second sample recorded. Then, we accept if $x_1 + x_2 \leq c_2$ and reject if $x_1 + x_2 > c_2$. The major advantage of double sampling is that on the average fewer observations are required to reach a decision. (In "screening" or "rectifying" inspection - see par. 9 on Dodge-Romig LTPD Plans - less average total inspection is necessary.)

There will be many sampling plans n_1 , n_2 , c_1 , and c_2 satisfying the given conditions. (In fact, as in the single sample case, there are an infinite number of solutions.) Consequently, in order to obtain a unique plan we can impose an additional condition. Actually, this was also done in the single sample case of par. 5, where we minimized the function $G(n, c) = n$ subject to the given power requirements. In double sampling we need to consider a function of four constants n_1 , n_2 , c_1 , and c_2 , say $G(n_1, n_2, c_1, c_2)$. Possible candidates for such a function include

- Any function of the average number of observations required to reach a decision.
- The Dodge-Romig^{1 1} (and Eq. 9-2 that follows) average total inspection number required in screening or rectifying inspection.
- A generalization of the Dodge-Romig function to a cost function as proposed by A. Hald.^{1 2}

*Operating Characteristic.

It is the responsibility of the individual designing the sampling plan to construct his own G -function so that it reflects some criteria of interest. The function can be minimized (or maximized) by trial. In this paragraph, we consider only plans which satisfy Conditions 7-1 and not the minimization (or maximization) of a G -function.

For the type of double sampling plan which we have described, it can be verified that

$$\left. \begin{aligned} \text{Power} &= K(p, n_1, n_2, d_1, d_2) \\ &= P(d_2, n_1, p) + \sum_{j=0}^{d_2 - d_1 - 1} b(d_1 + j, n_1, p) P(d_2 - d_1 - j, n_2, p) \end{aligned} \right\} \quad (7-2)$$

Consequently, we may write the two conditions of Eq. 7-1 as

$$K(p_0, n_1, n_2, d_1, d_2) \leq \alpha_0 \quad (7-3)$$

and

$$K(p_1, n_1, n_2, d_1, d_2) \geq 1 - \beta_1 \quad (7-4)$$

Obtaining solutions for Eqs. 7-3 and 7-4 is accomplished by trial. If we use the information that follows, these solutions can be found rather rapidly.

To determine which double sampling plans satisfy the given power conditions, we begin by listing the single sample solutions (and nonsolutions). This information is essential to the double sample case. As demonstrated in par. 5, we can obtain the following type of information: If

$$\begin{aligned} d = 1 & \quad n \leq n_U(1), n \geq n_L(1), n_L(1) > n_U(1), \quad \text{no solution possible} \\ d = 2 & \quad n \leq n_U(2), n \geq n_L(2), n_L(2) > n_U(2), \quad \text{no solution possible} \\ & \quad \vdots \\ d = r - 1 & \quad n \leq n_U(r - 1), n \geq n_L(r - 1), n_L(r - 1) > n_U(r - 1), \quad \text{no solution possible} \\ d = r & \quad n \leq n_U(r), n \geq n_L(r), \text{ solutions for } n_L(r) \leq n \leq n_U(r) \\ d = r + 1 & \quad n \leq n_U(r + 1), n \geq n_L(r + 1), \text{ solutions for } n_L(r + 1) \leq n \leq n_U(r + 1) \text{ etc.} \end{aligned}$$

That is, solutions exist if $d \geq r$ but not if $d < r$. Moreover, for the double sample case, the following comments are helpful:

(1) Double sampling plans satisfying the given power conditions exist only for all $d_2 \geq r$ and $d_1 = 0, 1, 2, \dots, d_2 - 1$. If solutions exist for given d_1 and d_2 with $n_1 = n_{1m}$, the minimum n to admit solutions, then solutions exist for all n_1 such that $n_{1m} \leq n_1 \leq n_U(d)$, a set which contains the single sample solution. Ordinarily one would be interested only in solutions obtained with $d_2 = r$, since larger d_2 's require larger sample sizes.

(2) Bounds on n_1 for chosen d_1 and d_2 are immediately obtainable. It can be shown that we must have

$$P(d_1, n_1, p_1) \geq 1 - \beta_1 \quad (7-5)$$

which means

$$n_1 > n_{1L}, \text{ and}$$

$$P(d_2, n_1, p_0) \leq \alpha_0 \quad (7-6)$$

which means

$$n_1 \leq n_{1U}.$$

Solutions do not always exist for $n_1 = n_{1L}$, but this number provides a lower bound in our search.

(3) It can be shown that $n_1 + n_2 \geq n_L(d_2)$. In other words, the combined sample for double sampling has to be at least as large as the minimum sample size possible in single sampling.

(4) For given d_1 and d_2 , lower and upper bounds on n_2 , say n_{2L} and n_{2U} , can be found for each n_1 . Of course, if $n_2 < n_{2L}$, solutions are not possible for the chosen n_1 , and n_1 has to be increased. Both n_{2L} and n_{2U} are nonincreasing functions of n_1 which behave very well, a fact which considerably reduces the number of trials required, since as n_1 increases $n_1 + n_{2L}$ rapidly approaches $n_L(d_2)$ and equals $n_L(d_2)$ for at least $n_1 = n_L(d_2)$.

In view of these observations, the recommended procedure is

- (1) List the single sample solutions and nonsolutions.
- (2) Select any d_2 (usually $d_2 = r$) for which solutions exist.
- (3) Select any d_1 such that $1 \leq d_1 < d_2$. We would probably begin with $d_1 = 1$ and increase d_1 a unit at a time. In a number of plans used in practical situations we have $d_1 \leq d_2/2$.
- (4) For chosen d_1 and d_2 determine bounds on n_1 . We would probably begin looking for solutions with the smallest n_1 satisfying Eq. 7-5 and increase n_1 a unit at a time.
- (5) By trial for the chosen d_1 , d_2 and n_1 , find bounds on n_2 determined so that the two conditions on power are satisfied. If $n_{2L} \leq n_{2U}$, then one set of solutions is the chosen d_1 , d_2 , n_1 , and $n_{2L} \leq n_2 \leq n_{2U}$. Usually, we would prefer that n_2 be as small as possible, i.e., $n_2 = n_{2L}$.
- (6) Select another n_1 , d_1 , d_2 and repeat Step (5), proceeding in some orderly fashion. In an application we would terminate the search when we have found the solution minimizing (or maximizing) the appropriate $G(n_1, n_2, c_1, c_2)$.

We now consider an example.

Example 7-1

Find some double sampling plans for the case $p_0 = .05$, $p_1 = .20$, $\alpha_0 = .05$, and $\beta_1 = .10$.

Solution

In Example 5-2 we considered the single sample problem using the inequalities $P(d, n, .05) \leq .05$ and $P(d, n, .20) \geq .90$

with $d = 1$	$n \leq 1$ and	$n \geq 11$,	no solution possible
$d = 2$	$n \leq 7$ and	$n \geq 18$,	no solution possible
$d = 3$	$n \leq 16$ and	$n \geq 25$,	no solution possible
$d = 4$	$n \leq 28$ and	$n \geq 32$,	no solution possible

$$\begin{array}{llll} d = 5 & n \leq 40 \text{ and } n \geq 38, & \text{or } 38 \leq n \leq 40 \\ d = 6 & n \leq 53 \text{ and } n \geq 45, & \text{or } 45 \leq n \leq 53 \end{array}$$

etc.

Double sampling plans are then possible for $d_2 \geq 5$. With $d_2 = 5$ we can have $d_1 = 1, 2, 3$, or 4. Since all solutions are obtained in a similar manner, we consider only the case $d_1 = 4$ and $d_2 = 5$.

Inequalities, Eqs. 7-5 and 7-6, are now $P(4, n_1, .20) \geq .90$ and $P(5, n_1, .05) \leq .05$. From the previous single sample results we see that these two inequalities imply $n_1 \geq 32$ and $n_1 \leq 40$.

With $n_1 = 32$, $d_1 = 4$ and $d_2 = 5$, the power at $p = .20$ is

$$\begin{aligned} K(.20, 32, n_2, 4, 5) &= P(5, 32, .20) + b(4, 32, .20) P(1, n_2, .20) \\ &= .79562 + .11129 P(1, n_2, .20) \end{aligned}$$

Using the fact that $n_1 + n_2 \geq 38$, we find by trial

$$K(.20, 32, 13, 4, 5) = .79562 + .11129(.94502) = .90079$$

and

$$K(.20, 32, 12, 4, 5) = .79562 + .11129(.93128) = .89926$$

so that $n_2 \geq 13$ makes power $\geq .90$. Similarly, with $p = .05$ we have

$$K(.05, 32, n_2, 4, 5) = P(5, 32, .05) + b(4, 32, .05) P(1, n_2, .05).$$

By trial we obtain

$$K(.05, 32, 15, 4, 5) = .04904 \text{ and } K(.05, 32, 16, 4, 5) = .05028$$

so that $n_2 \leq 15$ makes power $\leq .05$.

Having found solutions with one n_1 , less labor is required for $n_1 + 1$. With $n_1 = 33$ we find $K(.20, 33, 8, 4, 5) = .90219$ and $K(.20, 33, 7, 4, 5) = .89794$ so that $n_2 \geq 8$. Also, $K(.05, 33, 12, 4, 5) = .04959$ $K(.05, 33, 13, 4, 5) = .05115$ so that $n_2 \leq 12$.

Continuing the calculations, we soon have all the solutions for $d_1 = 4$ and $d_2 = 5$. These are

$n_1 = 32,$	$13 \leq n_2 \leq 15$	$n_1 = 37,$	$1 \leq n_2 \leq 3$
$n_1 = 33,$	$8 \leq n_2 \leq 12$	$n_1 = 38,$	$0 \leq n_2 \leq 2$
$n_1 = 34,$	$6 \leq n_2 \leq 9$	$n_1 = 39,$	$0 \leq n_2 \leq 1$
$n_1 = 35,$	$4 \leq n_2 \leq 7$	$n_1 = 40,$	$n_2 = 0$
$n_1 = 36$	$3 \leq n_2 \leq 5$		

Similarly, we could obtain all the solutions for $d_1 = 1, 2, 3$ with $d_2 = 5$. Had we sought to minimize a G -function, it would have been better to start with $d_1 = 1$ followed by $d_1 = 2$, since $d_1 = 4$ requires such a large n_1 .

Since the second sample may or may not be taken, it is of interest to know the average number

of observations which are required to reach a decision (i.e., the ASN or average sample number) with any double sampling plan n_1 , n_2 , d_1 , and d_2 . We see that n_1 observations are required if $x_1 \leq d_1 - 1$ or $x_1 \geq d_2$, while $n_1 + n_2$ observations must be taken if $d_1 \leq x_1 < d_2$. Hence, the random variable W , the total sample size, takes on the value n_1 with probability $Pr(X_1 \leq d_1 - 1) + Pr(X_1 \geq d_2)$ and the value $n_1 + n_2$ with probability $Pr(d_1 \leq X_1 < d_2)$, and by the definition of expected value we have that

$$\begin{aligned} E(W) &= n_1 [Pr(X_1 \leq d_1 - 1) + Pr(X_1 \geq d_2)] + (n_1 + n_2) [Pr(d_1 \leq X_1 < d_2)] \\ &= n_1 + n_2 [Pr(d_1 \leq X_1 < d_2)] \end{aligned}$$

In terms of binomial sums we have then that $E(W)$ is given simply by

$$E(W) = n_1 + n_2 [P(d_1, n_1, p) - P(d_2, n_1, p)] \quad (7-7)$$

for any quality level p .

8. CURTAILED AND SEMI-CURTAILED ATTRIBUTE SAMPLING: SINGLE AND DOUBLE SAMPLE CASES

Suppose that a single sample attribute plan is to be used. Sampling is performed so that the Binomial Conditions 1-1 are satisfied. The sample size n and the acceptance number c (or rejection number $c + 1 = d$) have been determined possibly to satisfy two conditions on power as in Example 5-2. The usual way to proceed is to take n observations, observe the number of defectives X , and accept if and only if $x \leq c$. We will call this procedure regular binomial sampling.

If observations are expensive, there are a number of ways to attempt to reduce the amount of inspection. One of these, called curtailed sampling, calls for taking observations one at a time and quitting as soon as the decision is obvious. To illustrate, consider the sampling plan of Example 5-2 where we found $n = 38$ and $c = 4$. If items are inspected one at a time, it is obvious that we could stop sampling and conclude that the process is unsatisfactory as soon as the 5th defective is observed. This could happen as early as the 5th observation or as late as the 38th observation. Similarly, once we have observed 34 nondefectives, then sampling can be terminated with the conclusion that the process is satisfactory since it is then impossible to obtain more than 4 defectives in 38 observations. Since c is usually rather small compared to n , a reasonable approximation to this curtailed sampling procedure is obtained by stopping as soon as too many defectives are observed. When this is done, the term semi-curtailed sampling is used. Intuitively, we would expect the power or OC curve to be the same whether we use regular binomial sampling, curtailed binomial sampling, or semi-curtailed binomial since the latter two procedures can be regarded as special cases of the first in which the inspector does not record all the information available to him. That our intuition is correct can be verified mathematically. In general, with curtailed sampling we stop sampling and (a) reject as soon as $c + 1$ defectives are observed, or (b) accept as soon as $n - c$ nondefectives are observed. In the semi-curtailed case we reject as soon as $c + 1$ defectives are observed, accepting if this fails to happen (in which case all n observations are made).

When sampling is curtailed or semi-curtailed, the number of observations actually required to reach a decision, say W , is a random variable which can assume values from $c + 1$ to n . It is of interest to know the expected value of W , say $E(W)$, sometimes called the average sample number (abbreviated ASN). Obviously, this average will be less than n and will depend on p . If sampling is curtailed, it can be shown that

$$E(W) = \frac{c+1}{p} [P(c+2, n+1, p)] + \frac{n-c}{1-p} [1 - P(c+1, n+1, p)] \quad (8-1)$$

The corresponding formula for semi-curtailed sampling is

$$E(W) = \frac{c+1}{p} [P(c+2, n+1, p)] + n [1 - P(c+1, n, p)] \quad (8-2)$$

Example 8-1

For the sampling plan of Example 5-2 find the average number of observations required for $p = .05, .10, .15$ and $.20$ with both curtailed and semi-curtailed sampling.

Solution

We had $n = 38$ and $c = 4$. For curtailed sampling we need

$$E(W) = \frac{5}{p} [P(6, 39, p)] + \frac{34}{1-p} [1 - P(5, 39, p)]$$

With $p = .05$, we have

$$E(W) = \frac{5}{.05} (.01230) + \frac{34}{.95} (1 - .04376) = 35.45$$

Similarly, with $p = .10, .15$, and $.20$, we find

$$E(W) = 34.05, 29.43, \text{ and } 24.18, \text{ respectively}$$

When sampling is semi-curtailed, we need

$$E(W) = \frac{5}{p} [P(6, 39, p)] + 38 [1 - P(5, 38, p)]$$

With $p = .05$, we obtain

$$E(W) = \frac{5}{.05} (.01230) + 38 [1 - .03973] = 37.72$$

Similarly, with $p = .10, .15$, and $.20$, we find

$$E(W) = 34.98, 29.70, \text{ and } 24.25, \text{ respectively}$$

Curtailed and semi-curtailed sampling can be used in conjunction with double sampling to further reduce the expected number of observations. Formulas for the ASN, however, are much more complicated than they are for regular double sampling. Since there is little difference in the ASN's obtained from curtailed and semi-curtailed sampling, and formulas for the latter are simpler, we will consider only the case in which semi-curtailed sampling is used in both samples. In this case then, it can be shown that

$$\begin{aligned}
 E(W) = & \frac{d_2}{p} P(d_2 + 1, n_1 + 1, p) + n_1 [1 - P(d_2, n_2, p)] \\
 & + n_2 \{P(d_1, n_1, p) - K(p, n_1, n_2, d_1, d_2)\} \\
 & + \frac{1}{p} \sum_{j=0}^{d_2-d_1-1} (d_2 - d_1 - j) b(d_1 + j, n_1, p) P(d_2 - d_1 + 1 - j, n_2 + 1, p)
 \end{aligned} \quad (8-3)$$

where $K(p, n_1, n_2, d_1, d_2)$ is defined in par. 7 by Eq. 7-2. As in the single sample case, the power is the same for regular, curtailed, and semi-curtailed double sampling. Crag^{1,4} gives a result equivalent to Eq. 8-3 which can be used when p , n_1 , and n_2 are not entries in the table.

Example 8-2

If semi-curtailed sampling is used with both samples for the double sampling plan $n_1 = 50$, $n_2 = 100$, $d_1 = 2$, and $d_2 = 4$, find the ASN for $p = .05$ and $p = .10$.

Solution

We use Eq. 8-3. With $p = .05$, the first two terms are

$$\begin{aligned}
 & \frac{4}{.05} P(5, 51, .05) + 50 [1 - P(4, 50, .05)] \\
 & = 80(.110416) + 50(.760408) = 46.8537
 \end{aligned}$$

For the next term we need

$$\begin{aligned}
 K(.05, 50, 100, 2, 4) &= P(4, 50, .05) + b(2, 50, .05) P(2, 100, .05) + b(3, 50, .05) P(1, 100, .05) \\
 &= .239592 + (.261101)(.962919) + (.219875)(.994080) = .709584
 \end{aligned}$$

Then the third term is

$$\begin{aligned}
 & 100[P(2, 50, .05) - K(.05, 50, 100, 2, 4)] \\
 & = 100[.720568 - .709584] = 1.0984
 \end{aligned}$$

The last term is

$$\begin{aligned}
 & \frac{1}{.05} [2b(2, 50, .05) P(3, 101, .05) + b(3, 50, .05) P(2, 101, .05)] = \\
 & 20[2(.261101)(.885796) + (.219875)(.964477)] = 13.4926
 \end{aligned}$$

Finally, we have $E(W) = 46.8537 + 1.0984 + 13.4926 = 61.44$

Similarly, when $p = .10$, $E(W) = 38.93$.

By Eq. 7-7, it can be verified that with regular double sampling the two ASN's are, respectively, 98.10 and 71.65, which are therefore much larger.

9. DODGE-ROMIG LTPD (LOT TOLERANCE PERCENT DEFECTIVE) PLANS

Consider a product that is mass produced and is assembled at random into lots of size N . From each lot, items are drawn at random and the number of defectives in a sample of n items is observed. If the lot is accepted on the basis of the sample of n items, then all defective items found when sampling are replaced by nondefectives. If the lot is rejected on the basis of the sample, then the remainder of the lot ($N - n$ items) is also inspected and all defective items found during inspection of the lot are replaced. The procedure just described is called screening* or rectifying** inspection. Our goal here is to find single and double sample rectifying inspection plans which minimize the average total amount of inspection if the process fraction defective p is equal to \bar{p} , the "process average", but subject also to the condition that the power be $\geq 1 - \beta_1$ (or $OC \leq \beta_1$) if the process actually produces a fraction defective equal to an undesirable level p_1 . (In the language of Dodge-Romig¹¹, $p_1 = p_t = \text{LTPD}$, i.e., the lot tolerance percent defective, and $\beta_1 = \text{the Consumer's Risk}$.)

We consider first the single sample case. A sample of size n is selected at random and the number of defectives X is observed. If $x < d$ defectives are found in the sample, then the lot is accepted (defective items in the sample replaced), while if $x \geq d$ the lot is rejected and all defective items in the lot replaced. The unconditional distribution of X is a binomial probability distribution with parameters n and p , and the power is clearly given by $Pr(X \geq d) = P(d, n, p)$. The average amount of inspection per lot is thus seen to be

$$I_s = n + (N - n)P(d, n, p) \quad (9-1)$$

An LTPD rectifying inspection is obtained by minimizing Eq. 9-1 when $p = \bar{p}$ subject to the condition

$$P(d, n, p_1) \geq 1 - \beta_1 \quad (9-2)$$

(To be strictly correct, the left-hand side of Eq. 9-2 should be a sum of hypergeometric probabilities. However, as Dodge and Romig¹¹ have done, we use a binomial approximation.) The minimization is accomplished by trial by starting with $d = 1$ and increasing d one unit at a time. For each d , the minimum n satisfying Eq. 9-2 is found by inspection in the table, and I_s is computed for $p = \bar{p}$. Calculations should cease of course when the minimum, say \bar{I}_s , is observed.

Dodge-Romig¹¹ give some plans of this type for $\beta_1 = .10$ and for a few values of p_1 .

Example 9-1

If $N = 100$, $p_1 = .10$, and $\beta_1 = .10$, find the rectifying inspection plan which minimizes the average total inspection for an average process level of $\bar{p} = .02$.

Solution

According to Eq. 9-2, we need $P(d, n, .10) \geq .90$. Using the binomial table, we find that with

$$d = 1 \text{ and } n = 22, I_s = 22 + 78 P(1, 22, .02) = 22 + 78(.35883) = 49.99$$

*A term due to Dodge and Romig.

**A term due to the British.

$$d = 2 \text{ and } n = 38, I_S = 38 + 62 P(2, 38, .02) = 38 + 62 (.17603) = 48.91$$

$$d = 3 \text{ and } n = 52, I_S = 52 + 48 P(3, 52, .02) = 52 + 48 (.08593) = 56.12$$

Further calculations are obviously unnecessary. The desired sampling plan is therefore $n = 38$ and $d = 2$ ($c = 1$) with $\bar{I}_S = 48.91$.

Next, we consider the somewhat more complicated double sample case. From each lot, a random sample of size n_1 is drawn and inspected. Let X_1 be the number of defectives in the sample of n_1 . If $x_1 < d_1$, defectives are found in this sample, the defective items in the sample are replaced by nondefectives and the lot is accepted without further inspection. If $x_1 \geq d_2$, the lot is rejected and totally inspected, and all defective items are replaced by good ones. If $d_1 \leq x_1 < d_2$, a second sample of size n_2 is selected at random from the remaining $N - n_1$ items, and X_2 , the number of defectives in the second sample is observed. Then, if $d_1 \leq x_1 + x_2 < d_2$, the lot is accepted without further inspection, but all defective items in both samples are replaced by good ones. Finally, if $x_1 + x_2 \geq d_2$, then the lot is rejected and all defective items in the lot are replaced by acceptable items. The unconditional distributions of X_1 and X_2 are binomial with parameters p and n_1 , and p and n_2 , respectively. Now the average total inspection for the double sampling case is

$$I_D = n_1 + n_2 P(d_1, n_1, p) + (N - n_1 - n_2) K(p, n_1, n_2, d_1, d_2) \quad (9-3)$$

where the K -function is the power defined by Eq. 7-2. We seek to minimize Eq. 9-3 when $p = \bar{p}$, getting say \bar{I}_D , subject to the condition

$$K(p_1, n_1, n_2, d_1, d_2) \geq 1 - \beta_1 \quad (9-4)$$

Again, minimization may be accomplished by trial. (As in the single sample case, to be strictly correct the left-hand side of Eq. 9-4 should be given in terms of hypergeometric probabilities.)

Since there are now so many possibilities, we formulate a systematic approach.

The following comments are helpful:

(1) For given n_1 , d_1 , and d_2 , select n_2 as small as possible so as to satisfy Eq. 9-4. A larger n_2 will just make I_D larger.

(2) For every d_1 and d_2 , the condition $OC \leq \beta_1$ for $p = p_1$ implies

$$P(d_1, n_1, p_1) \geq 1 - \beta_1 \quad (9-5)$$

This inequality yields a lower bound on n_1 , giving $n_1 \geq n_{1L}$, say. Also if

$$P(d_2, n_1, p_1) \geq 1 - \beta_1 \quad (9-6)$$

then the power $> 1 - \beta_1$ for every n_2 . Letting n_{1U} be the smallest n_1 to satisfy Eq. 9-6, we need consider only $n_1 \leq n_{1U}$. Usually it will be apparent that calculations with the given d_1 and d_2 can cease before n_1 is made as large as n_{1U} .

(3) Only for $n_1 \leq \bar{I}_S$ do we need consider the plan, since otherwise $I_D > \bar{I}_S$, and the objective of double sampling, to reduce average total inspection, would not be possible.

(4) For chosen d_1 and d_2 we must have $n_1 + n_2 \geq n_{1U}$.

(5) For chosen d_1 and d_2 , it may be shown that as n_1 increases, the sum $n_1 + n_2$ is nonincreasing and has a minimum value of n_{1U} .

In a numerical problem, we suggest the following steps:

(1) Calculate \bar{I}_S , since, as we have already mentioned, it is not necessary to consider plans for which $I_D > \bar{I}_S$.

(2) With $d_1 = 1$, determine n_{1L} from Eq. 9-5.

(a) With $d_2 = 2$

1. Find n_{1U} from Eq. 9-6.

2. By trial, using the fact that $n_1 + n_2 \geq n_{1U}$, then find the minimum value of n_2 , say n_{2L} , which satisfies Eq. 9-4.

3. With n_{1L} and n_{2L} , find I_D for the process average $p = \bar{p}$.

(b) Repeat (a) with $d_2 = 3$. As a first guess, for the new n_{2L} increase the old n_{2L} by the same amount n_{1U} has increased.

(c) Repeat (a) with $d_2 = 4$, etc.

Terminate the process when it is obvious that I_D must increase with any further increase in d_2 .

(3) Repeat Step (2) with n_{1L} replaced by $n_{1L} + 1$. Then repeat Step (2) with n_{1L} replaced by $n_{1L} + 2$, etc., terminating the process when it is obvious that a minimum has been found for each d_2 and for which it has been necessary to consider $d_1 = 1$.

(4) Repeat Steps (2) and (3) now with $d_1 = 2$, then with $d_1 = 3$, then with $d_1 = 4$, etc., and terminate these trials when the values of I_D become too large. This happens at worst when $n_1 > \bar{I}_S$, maybe sooner.

(5) By observation, select \bar{I}_D .

The major advantage of these suggested proceedings is that in the calculation of power all the previous $b(d_1 + j, n_1, p)$ are used as d_2 is increased by a unit. We now consider an example.

Example 9-2

If $N = 100$, $p_1 = .10$, and $\beta_1 = .10$, find the double sampling rectifying inspection plan which minimizes the average total inspection for $\bar{p} = .02$.

Solution

In Example 9-1, we found $\bar{I}_S = 48.91$. Hence, we need consider only those plans for which $I_D < 48.91$.

As a preliminary calculation, we find the minimum n to satisfy $P(d, n, .10) \geq .90$ for a few d . From the binomial table, we find for $d = 1$ that $n = 22$, for $d = 2$ that $n = 38$, for $d = 3$ that $n = 52$, for $d = 4$ that $n = 65$, for $d = 5$ that $n = 78$, etc. Because of Eq. 9-5, the only candidates for d_1 are seen to be $d_1 = 1$ and $d_1 = 2$ since with $d_1 > 3$, $n_1 \geq 52$ and $I_D > 52$.

With $d = 1$, we need according to Eqs. 9-5 and 9-6 that $22 \leq n_1 \leq 38$. Also, we must have $n_1 + n_2 \geq 38$. With $d_1 = 1$, $d_2 = 2$ and $n_1 = 22$, the power at $p = .10$ is

$$\begin{aligned} K(.10, 22, n_2, 1, 2) &= P(2, 22, .10) + b(1, 22, .10) P(1, n_2, .10) \\ &= .66080 + .24072 P(1, n_2, .10) \end{aligned}$$

By trial, we find $K(.10, 22, 48, 1, 2) = .89999$ and $K(.10, 22, 49, 1, 2) = .90014$.

Then with $n_1 = 22$, $n_2 = 49$, $d_1 = 1$, and $d_2 = 2$, we have

$$\begin{aligned} K(.02, 22, 49, 1, 2) &= P(2, 22, .02) + b(1, 22, .02) P(1, 49, .02) \\ &= .07096 + (.28787) (.62840) = .25186 \end{aligned}$$

Thus,

$$\begin{aligned} I_D &= 22 + 49 P(1, 22, .02) + 29 K(.02, 22, 49, 1, 2) \\ &= 22 + 49(.35883) + 29(.25186) = 46.89 \end{aligned}$$

We next take $d_2 = 3$ with $d_1 = 1$ and $n_1 = 22$.

Now $n_1 + n_2 \geq 52$, since $n_1 = 52$. When $p = .10$, the power is

$$\begin{aligned} K(.10, 22, n_2, 1, 3) &= P(3, 22, .10) + b(1, 22, .10) P(2, n_2, .10) \\ &\quad + b(2, 22, .10) P(1, n_2, .10) \\ &= .37996 + .24072 P(2, n_2, .10) \\ &\quad + .28084 P(1, n_2, .10) \end{aligned}$$

By trial, we find

$$K(.10, 22, 69, 1, 3) = .89987 \text{ and } K(.10, 22, 70, 1, 3) = .90002$$

With $n_1 = 22$, $n_2 = 70$, $d_1 = 1$, and $d_2 = 3$, we have

$$\begin{aligned} K(.02, 22, 70, 1, 3) &= P(3, 22, .02) + b(1, 22, .02) P(2, 70, .02) \\ &\quad + b(2, 22, .02) P(1, 70, .02) \\ &= .00927 + .28787(.40956) + .06169(.75688) = .17386 \end{aligned}$$

and when $\bar{p} = .02$, we find that

$$\begin{aligned} I_D &= 22 + 70 P(1, 22, .02) + 8 K(.02, 22, 70, 1, 3) \\ &= 22 + 70(.35883) + 8(.17386) = 48.51 \end{aligned}$$

Since the second term of I_D is increasing faster than the third term is decreasing, it is not necessary therefore to try $d_1 = 1$ and $d_2 = 4$.

We next repeat the above calculations with $n_1 = 23$, then with $n_1 = 24$, then with $n_1 = 25$, and terminate the calculations when it is obvious that minimum I_D have been found for $d_1 = 1$, $d_2 = 2$, and for $d_1 = 1$ and $d_2 = 3$. The results are as follows:

$d_1 = 1, d_2 = 2$		$d_1 = 1, d_2 = 3$	
(n_1, n_2)	I_D	(n_1, n_2)	I_D
(22, 49)	46.89	(22, 70)	48.51
(23, 29)	43.74	(23, 48)	44.47
(24, 23)	43.16	(24, 41)	43.65
(25, 19)	43.00	(25, 37)	43.66
(26, 16)	43.06	(26, 33)	43.50
(27, 14)	43.49	(27, 31)	44.08
(28, 12)	43.82	(28, 29)	44.60

Finally, we repeat all the above calculations with $d_1 = 2$. Some of the results are

$d_1 = 2, d_2 = 3$		$d_1 = 2, d_2 = 4$	
(n_1, n_2)	I_D	(n_1, n_2)	I_D
(38, 34)	47.00	(38, 54)	48.06
(39, 24)	46.98	(39, 53)	47.92
(40, 20)	47.56	(40, 38)	48.42
(41, 16)	48.03	(41, 33)	48.81
(42, 14)	48.80	(42, 30)	49.48

We observe finally that the desired plan is $n_1 = 25$, $n_2 = 19$, $d_1 = 1$ and $d_2 = 2$ with $I_D = 43.00$.

Since $\beta_1 = .10$ and $p_1 = .10$, we can compare our selection with the results tabulated by Dodge and Romig¹¹. They give $n = 20$ and $d = 1$ for the single sampling inspection plan. Since $P(1, 20, .10) = .87842$, the power requirement is not quite met. This plan gives $I_S = 20 + 80P(1, 20, .02) = 20 + 80(.33239) = 46.59$. Recall, however, that we had $n = 38$, $d = 2$ and $I_S = 48.91$. For the double sample case, Dodge and Romig give $n_1 = 25$, $n_2 = 13$, $d_1 = 1$ and $d_2 = 2$. The power of this plan when $p = .10$ is $K(10, 25, 13, 1, 2) = .87752$, again not quite meeting the specified requirement. The plan also yields $I_D = 40.06$ with $\bar{p} = .02$. The Dodge-Romig solutions were tabulated for intervals on both N and \bar{p} , and in most cases the n 's were rounded to the nearest 0 or 5. Hence, both tabled plans are reasonable approximations to the plans we found. The main advantages of the procedure of this paragraph over the Dodge-Romig tables are: (a) plans exactly meeting the specified conditions can be found, and (b) β_1 can be any value or level we choose for a particular problem.

As we observed in Example 9-2, I_D behaves fairly well, considering that parameters can assume only integer values. We conjecture that if n_1 and n_2 were continuous, then a unique relative minimum for I_D would exist.

10. METHOD OF COMPUTATION OF THE TABLES

As indicated in the Foreword to this Handbook, the function tabulated,

$$P(c, n, p) = \sum_{x=c}^n \binom{n}{x} p^x q^{n-x} \quad (p + q = 1) \quad (10-1)$$

is related to the Incomplete Beta-Function Ratio

$$I_p(c, m) = \int_0^p s^{c-1} (1-s)^{m-1} ds / \int_0^1 s^{c-1} (1-s)^{m-1} ds \quad (10-2)$$

by means of the relation

$$P(c, n, p) = I_p(c, n - c + 1) \quad (10-3)$$

On the other hand, the Incomplete Beta-Function Ratio $I_p(c, m)$, is known (Pearson¹) to satisfy the recursion formula

$$I_p(c, m) = p I_p(c - 1, m) + q I_p(c, m - 1) \quad (10-4)$$

Expressed in terms of the function $P = P(c, n, p)$ this recursion becomes

$$P(c, n, p) = p P(c - 1, n - 1, p) + q P(c, n - 1, p) \quad (10-5)$$

Eq. 10-5, together with

$$P(0, n, p) = (p + q)^n = 1$$

and

$$P(n, n, p) = p^n$$

permits the determination of all the tabular values desired. For fixed p , each value of P may be obtained for each n by increasing c from 0 to n once all the values of P for $n - 1$ are known. Thus, for example, for $p = 0.40$, $n = 52$, since

$$\begin{aligned} P(23, 51, 0.40) &= 0.2723344, & \text{and} \\ P(24, 51, 0.40) &= 0.1872942 & \text{are known, then} \\ P(24, 52, 0.40) &= 0.4(0.2723344) + 0.6(0.1872942) = 0.22131028 \end{aligned}$$

The computations for the original table, Army Ordnance Corps Pamphlet ORDP 20-1, dated September 1952, were carried out on the IBM Relay Calculators. The values of P were computed to twelve decimals, which were rounded back to seven decimals for the final listings. For the supplementary table—pages 578 through 626—involving $p = .001(.001).010$, the Card Programmed Calculator, which was capable of operating with ten decimal numbers, was used.

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

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n = 1

$\frac{\%}{1}$.01	.02	.03	.04	.05	.06	.07	.08
	.0100000	.0200000	.0300000	.0400000	.0500000	.0600000	.0700000	.0800000
$\frac{\%}{2}$	.09	.10	.11	.12	.13	.14	.15	.16
	.0900000	.1000000	.1100000	.1200000	.1300000	.1400000	.1500000	.1600000
$\frac{\%}{3}$	.17	.18	.19	.20	.21	.22	.23	.24
	.1700000	.1800000	.1900000	.2000000	.2100000	.2200000	.2300000	.2400000
$\frac{\%}{4}$	.25	.26	.27	.28	.29	.30	.31	.32
	.2500000	.2600000	.2700000	.2800000	.2900000	.3000000	.3100000	.3200000
$\frac{\%}{5}$	.33	.34	.35	.36	.37	.38	.39	.40
	.3300000	.3400000	.3500000	.3600000	.3700000	.3800000	.3900000	.4000000
$\frac{\%}{6}$	.41	.42	.43	.44	.45	.46	.47	.48
	.4100000	.4200000	.4300000	.4400000	.4500000	.4600000	.4700000	.4800000
$\frac{\%}{7}$	.49	.50						
	.4900000	.5000000						

AMCP 706-109

$$P(x, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 2

	.01	.02	.03	.04	.05	.06	.07	.08
$\frac{1}{2}$	.0199000	.0396000	.0591000	.0784000	.0975000	.1164000	.1351000	.1536000
$\frac{3}{4}$	.0001000	.0004000	.0009000	.0016000	.0025000	.0036000	.0049000	.0064000
	.09	.10	.11	.12	.13	.14	.15	.16
$\frac{1}{2}$	.1719000	.1900000	.2079000	.2254000	.2431000	.2604000	.2775000	.2944000
$\frac{3}{4}$	.0081000	.0100000	.0121000	.0144000	.0169000	.0196000	.0225000	.0256000
	.17	.18	.19	.20	.21	.22	.23	.24
$\frac{1}{2}$	.3111000	.3276000	.3439000	.3600000	.3759000	.3916000	.4071000	.4224000
$\frac{3}{4}$	.0289000	.0324000	.0361000	.0400000	.0441000	.0484000	.0529000	.0576000
	.25	.26	.27	.28	.29	.30	.31	.32
$\frac{1}{2}$	.4373000	.4524000	.4671000	.4816000	.4959000	.5100000	.5239000	.5376000
$\frac{3}{4}$	.0625000	.0676000	.0729000	.0784000	.0841000	.0900000	.0961000	.1024000
	.33	.34	.35	.36	.37	.38	.39	.40
$\frac{1}{2}$	.5511000	.5644000	.5775000	.5904000	.6031000	.6156000	.6279000	.6400000
$\frac{3}{4}$	.1089000	.1156000	.1225000	.1296000	.1369000	.1444000	.1521000	.1600000
	.41	.42	.43	.44	.45	.46	.47	.48
$\frac{1}{2}$	.6519000	.6636000	.6751000	.6864000	.6975000	.7084000	.7191000	.7296000
$\frac{3}{4}$	.1681000	.1764000	.1849000	.1936000	.2025000	.2116000	.2209000	.2304000
	.49	.50						
$\frac{1}{2}$	.7399000	.7500000						
$\frac{3}{4}$	.2401000	.2500000						

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 3

λ	.01	.03	.03	.04	.05	.06	.07	.08
P	.0097010	.0588080	.0873270	.1182640	.1426250	.1694160	.1986430	.2213120
Q	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
λ	.09	.10	.11	.12	.13	.14	.15	.16
P	.2464290	.2710000	.2950310	.3185200	.3414970	.3639440	.3858750	.4072960
Q	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
λ	.17	.18	.19	.20	.21	.22	.23	.24
P	.4282130	.4486320	.4685590	.4880000	.5069610	.5254480	.5434670	.5610240
Q	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
λ	.25	.26	.27	.28	.29	.30	.31	.32
P	.5781250	.5947750	.6109630	.6267820	.6422390	.6573400	.6720910	.6864960
Q	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
λ	.33	.34	.35	.36	.37	.38	.39	.40
P	.6994370	.7125040	.7253750	.7378560	.7499530	.7616720	.7730190	.7840000
Q	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
λ	.41	.42	.43	.44	.45	.46	.47	.48
P	.7946210	.8048880	.8148070	.8243840	.8336250	.8425360	.8511230	.8593920
Q	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
λ	.49	.50						
P	.8673490	.8750000						
Q	.0000000	.0000000						

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$$P(x, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 4

	.01	.02	.03	.04	.05	.06	.07	.08
1	.0394040	.0776316	.1147072	.1506534	.1854938	.2192510	.2519480	.2836070
2	.0005980	.0083363	.0081864	.0090957	.0140188	.0199109	.0267280	.0344859
3	.0000040	.0000318	.0001036	.0002483	.0004813	.0006251	.0013000	.0019251
4		.0000008	.0000008	.0000008	.0000003	.0000130	.0000240	.0000410
	.09	.10	.11	.12	.13	.14	.15	.16
1	.3142804	.3439000	.3725776	.4003046	.4271024	.4529918	.4779938	.5021284
2	.0429648	.0333000	.0283912	.0231981	.0186808	.0148003	.0115188	.0087981
3	.0027192	.0037000	.0048848	.0062899	.0079318	.0098235	.0119613	.0144179
4	.0000636	.0001000	.0001464	.0002074	.0002856	.0003842	.0005063	.0006554
	.17	.18	.19	.20	.21	.22	.23	.24
1	.5284168	.5478782	.5695328	.5904000	.6104992	.6298494	.6484696	.6663782
2	.1366016	.1308933	.1256176	.1208000	.1163464	.1122437	.1084592	.1049613
3	.0171464	.0201787	.0235864	.0272000	.0312096	.0355643	.0402728	.0453427
4	.0006352	.0010496	.0013032	.0016000	.0019448	.0023426	.0027964	.0033178
	.25	.26	.27	.28	.29	.30	.31	.32
1	.6835936	.7001342	.7160176	.7312614	.7458832	.7599000	.7733288	.7861862
2	.2617188	.2787013	.2958792	.3132237	.3307064	.3483000	.3659776	.3837133
3	.0507813	.0565947	.0627888	.0693663	.0763376	.0837000	.0914584	.0996147
4	.0039063	.0045696	.0053144	.0061466	.0070728	.0081000	.0092352	.0104888
	.33	.34	.35	.36	.37	.38	.39	.40
1	.7984888	.8102526	.8214938	.8322278	.8424704	.8522366	.8615416	.8704000
2	.4014816	.4192581	.4370188	.4547405	.4724008	.4899781	.5074512	.5248000
3	.1081704	.1171259	.1264813	.1362355	.1463872	.1569359	.1678728	.1792000
4	.0118292	.0133634	.0150063	.0167962	.0187416	.0208514	.0231344	.0256000
	.41	.42	.43	.44	.45	.46	.47	.48
1	.8788864	.8868330	.8944400	.9016550	.9084938	.9149694	.9210982	.9268838
2	.5430048	.5590469	.5739080	.5875709	.6000188	.6122357	.6242064	.6359169
3	.1909112	.2030011	.2154440	.2282291	.2414813	.2552003	.2683916	.2819155
4	.0282574	.0311170	.0341980	.0374810	.0410063	.0447746	.0487768	.0530042
	.49	.50						
1	.9333480	.9373000						
2	.6723580	.6713000						
3	.2976580	.3125000						
4	.0576480	.0625000						

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 5

	.01	.02	.03	.04	.05	.06	.07	.08
1	.0490100	.0960792	.1412660	.1846273	.2262191	.2660960	.3043116	.3409185
2	.0009901	.0038424	.0084721	.0147560	.0228725	.0318713	.0408493	.0487513
3	.0000099	.0000776	.0002580	.0006022	.0011581	.0019703	.0030799	.0045553
4		.0000008	.0000040	.0000124	.0000300	.0000617	.0001133	.0001917
5				.0000001	.0000003	.0000008	.0000017	.0000033
	.09	.10	.11	.12	.13	.14	.15	.16
1	.3759679	.4098100	.4413941	.4727681	.5015791	.5295730	.5568047	.5817881
2	.0473808	.0814600	.0963117	.1124509	.1291956	.1466673	.1647900	.1834910
3	.0063413	.0085600	.0113105	.0143169	.0175066	.0208003	.0242119	.0277587
4	.0003044	.0004600	.0006675	.0009373	.0012795	.0017057	.0022287	.0028594
5	.0000056	.0000100	.0000161	.0000249	.0000371	.0000538	.0000759	.0001049
	.17	.18	.19	.20	.21	.22	.23	.24
1	.6060959	.6293602	.6513216	.6723200	.6922944	.7112826	.7293216	.7464475
2	.0207002	.0223506	.0242377	.02627200	.02833165	.03041169	.03250616	.03461014
3	.00374538	.00437073	.00505275	.00579200	.00658863	.00744338	.00835557	.00932212
4	.0006081	.00044930	.0003256	.0002200	.0001304	.00006513	.00014175	.000134038
5	.00014220	.0001690	.0002476	.0003200	.0004084	.0005154	.0006436	.0007963
	.25	.26	.27	.28	.29	.30	.31	.32
1	.7626953	.7760993	.7926988	.8065083	.8195771	.8319300	.8435968	.8546066
2	.0471875	.0488738	.0499316	.0502743	.0511077	.0517800	.0522565	.0525048
3	.0035156	.0034424	.0032817	.0031647	.0030045	.0028080	.0025593	.0023583
4	.0006250	.0006062	.0005838	.0005587	.0005296	.0004970	.0004624	.0004260
5	.0000766	.0001181	.0001439	.00017210	.0002051	.00024300	.00028629	.00033564
	.33	.34	.35	.36	.37	.38	.39	.40
1	.8849875	.8747667	.8639709	.8526258	.8407563	.8283867	.8155404	.8022400
2	.0494940	.0481962	.0461580	.0440639	.0419326	.0397263	.0374585	.0350400
3	.0049431	.0049809	.0048169	.0045893	.0043012	.00394907	.00353084	.0030400
4	.0006419	.0006426	.0006085	.0005793	.0005457	.0005087	.0004682	.0004240
5	.00019135	.00015435	.00012528	.00010466	.00008344	.00006235	.00004124	.00002040
	.41	.42	.43	.44	.45	.46	.47	.48
1	.9285076	.9143643	.8998308	.8849268	.8696716	.8540835	.8381805	.8219796
2	.0601017	.0567179	.0528768	.0485799	.0438235	.0386132	.0329541	.0269508
3	.0048356	.0048403	.0047459	.0045573	.0042831	.00393194	.00350849	.00302540
4	.0009456	.0009309	.00091367	.0008933	.0008700	.00084476	.00081746	.00078899
5	.00015856	.00013691	.000117008	.000104916	.000094528	.000085965	.000079345	.000074804
	.49	.50						
1	.9454973	.9687300						
2	.0497501	.0812500						
3	.0013500	.0000000						
4	.0000500	.0000000						
5	.0000000	.0000000						

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$$P(n, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 6

	.01	.02	.03	.04	.05	.06	.07	.08
1	.0585179	.1141574	.1670280	.2178428	.2649061	.3081302	.3478038	.3836430
2	.0014604	.0054971	.0124659	.0215328	.0327738	.0459248	.0608897	.0777859
3	.0000194	.0001829	.0005044	.0011684	.0023898	.0037643	.0053859	.0071191
4	.0000001	.0000083	.0000116	.0000360	.0000864	.0001762	.0003310	.0005384
5			.0000001	.0000006	.0000018	.0000044	.0000095	.0000184
6							.0000001	.0000009
%								
	.09	.10	.11	.12	.13	.14	.15	.16
1	.4381701	.4685590	.5050187	.5385559	.5684738	.5944328	.6180508	.6401020
2	.0781534	.1148480	.1344700	.1556289	.1776058	.2002741	.2235157	.2471818
3	.0118348	.0185300	.0205936	.0260947	.0323759	.0395537	.0473386	.0560359
4	.0009477	.0018700	.0018273	.0025531	.0034413	.0044849	.0056858	.0071816
5	.0000328	.0000550	.0000787	.0001344	.0001986	.0002850	.0003987	.0005453
6	.0000005	.0000010	.0000018	.0000037	.0000048	.0000075	.0000114	.0000166
%								
	.17	.18	.19	.20	.21	.22	.23	.24
1	.6730596	.6959933	.7175705	.7378560	.7569135	.7748004	.7915776	.8073001
2	.0718775	.0858943	.0990077	.1114600	.1233034	.1346934	.1456414	.1561844
3	.0088457	.0158631	.0229790	.0298800	.1115487	.1249641	.1391080	.1539358
4	.0003519	.0013516	.0014076	.0016950	.0203280	.0339035	.0408053	.0471671
5	.0007312	.0009637	.0012504	.0016000	.0020216	.0025253	.0031016	.0036521
6	.0000241	.0000340	.0000470	.0000640	.0000858	.0001134	.0001480	.0001911
%								
	.25	.26	.27	.28	.29	.30	.31	.32
1	.8220215	.8357935	.8486658	.8606859	.8718947	.8823510	.8920818	.9011325
2	.0680645	.0809285	.0928802	.1038619	.1139238	.1231350	.1315720	.1392773
3	.0094356	.0155646	.0202934	.0245839	.0283795	.0316900	.0345485	.0369593
4	.0015977	.0031803	.0049130	.0067124	.0085816	.0104700	.0123698	.0142493
5	.0046367	.0065842	.0086678	.0079168	.0093726	.0109360	.0127400	.0147640
6	.0002441	.0003089	.0003874	.0004819	.0005940	.0007290	.0008875	.0010737
%								
	.33	.34	.35	.36	.37	.38	.39	.40
1	.9095414	.9179460	.9245811	.9310805	.9374785	.9431098	.9480736	.9533440
2	.0422168	.0461870	.0499201	.0533823	.0565550	.0593915	.0618441	.0640411
3	.0130483	.0138083	.0144810	.0150033	.0153688	.0156660	.0158952	.0160400
4	.0068779	.0068834	.0068339	.0067514	.0066559	.0065454	.0064155	.0062600
5	.0170239	.0165372	.0159318	.0152358	.0144777	.0136484	.0127408	.0117600
6	.0018915	.0018448	.0018383	.0018768	.0018657	.0018019	.0017517	.0016960
%								
	.41	.42	.43	.44	.45	.46	.47	.48
1	.9578195	.9619313	.9657036	.9691590	.9723194	.9752051	.9778356	.9802194
2	.07819481	.07965294	.0804670	.0813768	.0823406	.0833455	.0843904	.0854706
3	.04764088	.04707949	.0465963	.0461721	.0458023	.0454885	.0452252	.0450042
4	.01933103	.01798588	.0168135	.01589786	.01520639	.01472058	.01433163	.01403088
5	.0497652	.0469696	.0433963	.0394682	.0351900	.0315663	.02857109	.0261794
6	.0047501	.0054890	.0063214	.0072543	.0083018	.0094743	.0107792	.0122306
%								
	.49	.50						
1	.9824037	.9843750						
2	.0099643	.0096250						
3	.0073174	.0068300						
4	.0021984	.0017500						
5	.0002787	.0001750						
6	.0138413	.0156250						

	.01	.02	.03	.04	.05	.06	.07	.08
1	.0679347	.1338745	.1998142	.2657539	.3316937	.3976334	.4635732	.5295129
2	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
3	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
4	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
5	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
6					.0000000	.0000000	.0000000	.0000000
N	.09	.10	.11	.12	.13	.14	.15	.16
1	.4838390	.5297787	.5757184	.6216581	.6675978	.7135375	.7594772	.8054169
2	.1338745	.2657539	.3976334	.5295129	.6613923	.7932717	.9251511	.1057905
3	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
4	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
5	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
6	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
7	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
N	.17	.18	.19	.20	.21	.22	.23	.24
1	.7886395	.8345792	.8805189	.9264586	.9723983	.1018380	.1062777	.1107174
2	.1338745	.2657539	.3976334	.5295129	.6613923	.7932717	.9251511	.1057905
3	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
4	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
5	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
6	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
7	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
N	.25	.26	.27	.28	.29	.30	.31	.32
1	.8665161	.9124558	.9583955	.1000000	.1044397	.1088794	.1133191	.1177588
2	.1338745	.2657539	.3976334	.5295129	.6613923	.7932717	.9251511	.1057905
3	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
4	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
5	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
6	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
7	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
N	.33	.34	.35	.36	.37	.38	.39	.40
1	.9393909	.9853306	.1000000	.1044397	.1088794	.1133191	.1177588	.1221985
2	.1338745	.2657539	.3976334	.5295129	.6613923	.7932717	.9251511	.1057905
3	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
4	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
5	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
6	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
7	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
N	.41	.42	.43	.44	.45	.46	.47	.48
1	.9751135	.1000000	.1044397	.1088794	.1133191	.1177588	.1221985	.1266382
2	.1338745	.2657539	.3976334	.5295129	.6613923	.7932717	.9251511	.1057905
3	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
4	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
5	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
6	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
7	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
N	.49	.50						
1	.9910259	.1000000						
2	.1338745	.2657539						
3	.0000000	.0000000						
4	.0000000	.0000000						
5	.0000000	.0000000						
6	.0000000	.0000000						
7	.0000000	.0000000						

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$$P(r, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 6

	.01	.02	.03	.04	.05	.06	.07	.08
1	.0773553	.1492370	.2162566	.2786104	.3365796	.3904311	.4404108	.4867611
2	.0926901	.0103369	.0223408	.0381472	.0572447	.0791616	.1034657	.1297593
3	.0000339	.0004135	.0013499	.0030797	.0057882	.0094229	.0139786	.0204105
4	.0000007	.0000105	.0000515	.0001974	.0003718	.0006456	.0011338	.0020233
5		.0000002	.0000013	.0000052	.0000154	.0000373	.0000786	.0001493
6				.0000001	.0000004	.0000012	.0000029	.0000064
7							.0000001	.0000002
8								
%	.09	.10	.11	.12	.13	.14	.15	.16
1	.5297473	.5695328	.6063411	.6403555	.6717883	.7007821	.7275095	.7521241
2	.1576795	.1868953	.2171054	.2480969	.2794433	.3111035	.3438170	.3774085
3	.0288668	.0380118	.0487281	.0607692	.0743514	.0890764	.1052126	.1235980
4	.0034113	.0050244	.0071068	.0097216	.0129297	.0167897	.0213528	.0266703
5	.0002619	.0004317	.0006765	.0010169	.0014759	.0020790	.0028539	.0038303
6	.0000127	.0000234	.0000407	.0000673	.0001067	.0001633	.0002423	.0003499
7	.0000004	.0000007	.0000014	.0000026	.0000044	.0000074	.0000119	.0000185
8					.0000001	.0000001	.0000003	.0000004
%	.17	.18	.19	.20	.21	.22	.23	.24
1	.7747708	.7955859	.8146980	.8322278	.8482891	.8629886	.8754264	.8856965
2	.4057205	.4366148	.4669707	.4966835	.5256634	.5538346	.5811355	.6075088
3	.1411603	.1608200	.1814910	.2030822	.2254991	.2486641	.2724183	.2967225
4	.0327863	.0397393	.0475622	.0562816	.0659180	.0764853	.0879910	.1004362
5	.0050399	.0065160	.0082929	.0104064	.0128928	.0157883	.0191302	.0229548
6	.0004935	.0006816	.0009239	.0012314	.0016164	.0020926	.0026751	.0033805
7	.0000279	.0000413	.0000596	.0000845	.0001176	.0001611	.0002176	.0002899
8	.0000007	.0000011	.0000017	.0000026	.0000038	.0000055	.0000078	.0000110
%	.25	.26	.27	.28	.29	.30	.31	.32
1	.8998871	.9100805	.9193540	.9277796	.9354246	.9423520	.9486202	.9542837
2	.6329193	.6573339	.6807308	.7030939	.7244179	.7447017	.7639506	.7821752
3	.3214569	.3465239	.3718268	.3972716	.4227573	.4482862	.4738644	.4994923
4	.1130153	.1281168	.1433229	.1594099	.1763486	.1941044	.2126377	.2319043
5	.0272980	.0321948	.0376789	.0437826	.0505362	.0579677	.0661027	.0749644
6	.0042267	.0052329	.0064199	.0078097	.0094256	.0112922	.0134351	.0158611
7	.0003815	.0004964	.0006391	.0008150	.0010298	.0012893	.0016040	.0019791
8	.0000153	.0000209	.0000282	.0000378	.0000500	.0000656	.0000853	.0001100
%	.33	.34	.35	.36	.37	.38	.39	.40
1	.9593932	.9639959	.9681355	.9718328	.9751844	.9781660	.9808293	.9832038
2	.7993904	.8136136	.8287731	.8431988	.8585906	.8741089	.8897157	.9053643
3	.5235647	.5480813	.5721863	.5958195	.6189255	.6414842	.6635077	.6849654
4	.2518558	.2724399	.2936006	.3152791	.3374141	.3599420	.3827973	.4059136
5	.0945784	.0948435	.1060909	.1180242	.1307490	.1442673	.1585766	.1736704
6	.0186577	.0217635	.0253175	.0292594	.0336490	.0385171	.0438932	.0498074
7	.0024250	.0029818	.0035708	.0042944	.0051358	.0060709	.0070931	.0082197
8	.0001406	.0001766	.0002252	.0002821	.0003512	.0004348	.0005352	.0006554
%	.41	.42	.43	.44	.45	.46	.47	.48
1	.9883170	.9971937	.9988571	.9993203	.9996266	.9997928	.9998740	.9999440
2	.9016892	.9130054	.9218086	.9285345	.9338189	.9374974	.9406049	.9431761
3	.7051339	.7349765	.7640490	.7923517	.8189697	.8439925	.8675139	.8895316
4	.4292234	.4526588	.4781522	.4998359	.5230437	.5463101	.5697371	.5921650
5	.1895380	.2061644	.2233301	.2411115	.2603807	.2798086	.2998501	.3204741
6	.0562892	.0633676	.0710705	.0794247	.0884359	.0981079	.1084426	.1194402
7	.0099909	.0116653	.0135637	.0157085	.0181230	.0208321	.0238619	.0272400
8	.0007985	.0009683	.0011688	.0014048	.0016815	.0020048	.0023811	.0028179
%	.49	.50						
1	.9954232	.9990938						
2	.9602447	.9840438						
3	.8419484	.8554688						
4	.6146339	.6387108						
5	.3416336	.3632813						
6	.1317781	.1445313						
7	.0368948	.0351833						
8	.0033233	.0039023						

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 9

$\frac{x}{n}$	.01	.02	.03	.04	.05	.06	.07	.08
1	.0864828	.1662522	.2397689	.3074660	.3697506	.4270052	.4795889	.5276386
2	.0034357	.0131149	.0281582	.0477658	.0712114	.0978380	.1270524	.1583210
3	.0000803	.0026139	.0067996	.0144824	.0264410	.0437953	.0670123	.0957932
4	.0000012	.0000186	.0000590	.0001743	.0004426	.0012783	.0027713	.0053715
5		.0000004	.0000028	.0000113	.0000332	.0000798	.0001666	.0003136
6			.0000001	.0000003	.0000012	.0000033	.0000082	.0000178
7						.0000001	.0000003	.0000007
8								
9								
$\frac{x}{n}$	.09	.10	.11	.12	.13	.14	.15	.16
1	.5730702	.6125795	.6496436	.6835216	.7144558	.7426726	.7683831	.7917843
2	.1911857	.2851590	.3599213	.4251163	.4804882	.5256580	.5605208	.5854830
3	.0404781	.0529721	.0672496	.0832889	.1009264	.1201601	.1408934	.1628877
4	.0057041	.0083111	.0116851	.0158497	.0209015	.0269090	.0339315	.0420187
5	.0005453	.0008909	.0013838	.0020615	.0029649	.0041384	.0056287	.0074847
6	.0000351	.0000642	.0001106	.0001813	.0002847	.0004316	.0006340	.0009068
7	.0000015	.0000030	.0000057	.0000103	.0000177	.0000292	.0000464	.0000715
8		.0000001	.0000002	.0000003	.0000006	.0000012	.0000020	.0000031
9								
$\frac{x}{n}$	.17	.18	.19	.20	.21	.22	.23	.24
1	.8130597	.8323804	.8499054	.8657823	.8801484	.8931311	.9048483	.9154094
2	.4684340	.5012296	.5330389	.5637924	.5934148	.6218484	.6490509	.6749938
3	.1861356	.2104631	.2357321	.2618025	.2885334	.3157860	.3434218	.3713111
4	.0512099	.0615338	.0730086	.0856417	.0994300	.1143602	.1304053	.1475448
5	.0097568	.0124962	.0157541	.0195814	.0240280	.0291417	.0349682	.0415503
6	.0012664	.0017318	.0023240	.0030664	.0039844	.0051056	.0064598	.0080784
7	.0001071	.0001565	.0002239	.0003139	.0004323	.0005861	.0007820	.0010316
8	.0000053	.0000083	.0000127	.0000189	.0000277	.0000397	.0000561	.0000779
9	.0000001	.0000002	.0000003	.0000005	.0000008	.0000012	.0000018	.0000026
$\frac{x}{n}$	.25	.26	.27	.28	.29	.30	.31	.32
1	.9249153	.9344596	.9411284	.9460013	.9541515	.9596464	.9645479	.9689129
2	.6996613	.7230480	.7451586	.7660059	.7856098	.8039968	.8211982	.8372499
3	.3993275	.4273345	.4552307	.4829018	.5102460	.5371688	.5635841	.5894136
4	.1657257	.1849026	.2050189	.2260112	.2478100	.2703409	.2935250	.3172797
5	.0489273	.0571345	.0662028	.0761503	.0870218	.0988087	.1115286	.1251852
6	.0099945	.0122430	.0148598	.0178821	.0213477	.0252946	.0297691	.0347877
7	.0013428	.0017279	.0021999	.0027735	.0034646	.0042909	.0052716	.0064277
8	.0001068	.0001445	.0001932	.0002554	.0003342	.0004330	.0005561	.0007081
9	.0000038	.0000054	.0000076	.0000106	.0000145	.0000197	.0000264	.0000352
$\frac{x}{n}$	.33	.34	.35	.36	.37	.38	.39	.40
1	.9727035	.9762373	.9792881	.9819856	.9843662	.9864629	.9883059	.9899923
2	.8521914	.8606649	.86789150	.8740777	.8791303	.8831706	.8862166	.8894561
3	.6145872	.6390429	.6627267	.6855925	.7076016	.7287230	.7489326	.7682130
4	.3615198	.3861579	.3911056	.4162737	.4415733	.4669166	.4922170	.5173903
5	.1397759	.1552923	.1717193	.1890360	.2072151	.2262237	.2460227	.2665677
6	.0404096	.0466645	.0535882	.0612147	.0695762	.0787022	.0886197	.0993526
7	.0077818	.0093588	.0111822	.0132618	.0156858	.0184446	.0215299	.0250348
8	.0008945	.0011215	.0013962	.0017265	.0021215	.0025913	.0031470	.0038011
9	.0000464	.0000607	.0000788	.0001016	.0001300	.0001652	.0002067	.0002621
$\frac{x}{n}$	.41	.42	.43	.44	.45	.46	.47	.48
1	.9913370	.9925723	.9936485	.9945838	.9953946	.9960957	.9966700	.9972201
2	.9371566	.9441645	.9505255	.9562838	.9614824	.9661627	.9703644	.9741265
3	.7865533	.8039487	.8203997	.8359129	.8504969	.8641687	.8769467	.8888531
4	.5423549	.5670323	.5913478	.6152309	.6386154	.6614400	.6836483	.7051895
5	.2876090	.3096920	.3321576	.3551423	.3785791	.4023977	.4265251	.4508861
6	.1109212	.1233328	.1366281	.1507869	.1658220	.1817320	.1985102	.2161445
7	.0289732	.0333803	.0382916	.0437436	.0497728	.0564157	.0637089	.0716881
8	.0045874	.0054610	.0064986	.0076984	.0090802	.0106653	.0124771	.0145405
9	.0003274	.0004867	.0006926	.0009618	.0013057	.0017322	.0022419	.0028326
$\frac{x}{n}$	.49	.50						
1	.9976658	.9980469						
2	.9774822	.9804698						
3	.8992136	.9101583						
4	.7260180	.7460038						
5	.4754037	.5000000						
6	.2346175	.2539063						
7	.0803884	.0898438						
8	.0168823	.0185313						
9	.0016204	.0019531						

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$$F(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 10

p	.01	.02	.03	.04	.05	.06	.07	.08
1	.0956179	.1829272	.2625759	.3351674	.4012631	.4613849	.5160177	.5656115
2	.0042662	.0161776	.0345066	.0581538	.0861384	.1175880	.1517299	.1888225
3	.0001138	.0008639	.0027649	.0062137	.0115036	.0188378	.0283421	.0400754
4	.0000020	.0000305	.0001471	.0004426	.0010285	.0020293	.0035761	.0058013
5		.0000007	.0000054	.0000218	.0000637	.0001517	.0003139	.0005857
6			.0000001	.0000007	.0000028	.0000079	.0000193	.0000415
7					.0000001	.0000003	.0000008	.0000020
8								.0000001
p	.09	.10	.11	.12	.13	.14	.15	.16
1	.6105839	.6513216	.6881828	.7214990	.7515766	.7786984	.8031256	.8250988
2	.2854471	.2639011	.2327908	.1981725	.1603692	.1204400	.0800000	.0400000
3	.0540400	.0701908	.0864435	.1026818	.1187642	.1345298	.1498035	.1644005
4	.0080338	.0127952	.0177972	.0238388	.0310448	.0396642	.0496698	.0613577
5	.0010096	.0016349	.0025170	.0037161	.0052967	.0073263	.0098741	.0130101
6	.0000810	.0001469	.0002507	.0004069	.0006332	.0009505	.0013832	.0019593
7	.0000045	.0000091	.0000173	.0000308	.0000525	.0000856	.0001346	.0002051
8	.0000002	.0000004	.0000006	.0000015	.0000003	.0000002	.0000000	.0000000
9								
p	.17	.18	.19	.20	.21	.22	.23	.24
1	.8448396	.8625520	.8784233	.8924258	.9053172	.9166422	.9267332	.9357111
2	.5270412	.5608368	.5912435	.6241904	.6536289	.6815306	.7078843	.7326936
3	.2341305	.2628010	.2922304	.3222005	.3525586	.3831197	.4137173	.4441949
4	.0741472	.0883411	.1039261	.1208739	.1391418	.1586739	.1794024	.2012487
5	.0168038	.0213229	.0266325	.0327793	.0398624	.0478897	.0569196	.0669890
6	.0027098	.0036694	.0048757	.0063694	.0081935	.0103936	.0130167	.0161116
7	.0003042	.0004401	.0006229	.0008644	.0011763	.0015804	.0020885	.0027228
8	.0000226	.0000350	.0000528	.0000779	.0001127	.0001599	.0002232	.0003068
9	.0000010	.0000017	.0000027	.0000042	.0000064	.0000097	.0000143	.0000207
10			.0000001	.0000001	.0000002	.0000003	.0000004	.0000006
p	.25	.26	.27	.28	.29	.30	.31	.32
1	.9436865	.9507601	.9570237	.9625609	.9674476	.9717525	.9755381	.9788608
2	.7559748	.7777550	.7980705	.8169646	.8344869	.8506917	.8656366	.8793821
3	.4744072	.5042200	.5335112	.5621710	.5901015	.6172172	.6434445	.6687212
4	.2241249	.2479349	.2725761	.2979405	.3239164	.3503893	.3772433	.4043626
5	.0781269	.0903542	.1036831	.1181171	.1336503	.1502683	.1679475	.1866554
6	.0197277	.0239148	.0287224	.0341994	.0403932	.0473490	.0551097	.0637149
7	.0035057	.0044618	.0056181	.0070039	.0086507	.0105921	.0128637	.0155029
8	.0004158	.0005562	.0007350	.0009605	.0012420	.0015904	.0020179	.0025384
9	.0000296	.0000416	.0000577	.0000791	.0001072	.0001437	.0001906	.0002505
10	.0000010	.0000014	.0000021	.0000030	.0000042	.0000059	.0000082	.0000113
p	.33	.34	.35	.36	.37	.38	.39	.40
1	.9817716	.9841166	.9865373	.9884708	.9901507	.9916070	.9928666	.9939334
2	.8919901	.9035235	.9140456	.9236190	.9323056	.9401661	.9472594	.9536426
3	.6929966	.7162304	.7383926	.7594627	.7794292	.7982887	.8160453	.8327102
4	.4316320	.4580388	.4861730	.5132284	.5400038	.5664030	.5923361	.6177194
5	.2063514	.2267866	.2485045	.2708415	.2939277	.3176870	.3420385	.3669667
6	.0532005	.0635979	.0749341	.1072304	.1205026	.1347603	.1500068	.1662386
7	.0185489	.0229422	.0280243	.0335376	.0396252	.0461301	.0530949	.0604619
8	.0031671	.0039219	.0048213	.0058864	.0071403	.0086079	.0103163	.0122746
9	.0003263	.0004214	.0005329	.0006665	.0008268	.0010187	.0012546	.0015777
10	.0000153	.0000206	.0000276	.0000366	.0000481	.0000628	.0000814	.0001049
p	.41	.42	.43	.44	.45	.46	.47	.48
1	.9948888	.9956920	.9963797	.9969669	.9974670	.9978917	.9982511	.9985544
2	.9593705	.9644938	.9690684	.9731358	.9767429	.9799319	.9827422	.9852109
3	.8483007	.8628393	.8763538	.8888757	.9004403	.9110859	.9208530	.9297839
4	.6424762	.6665372	.6898401	.7123307	.7339621	.7546952	.7744905	.7933480
5	.3921728	.4177749	.4436094	.4695813	.4955954	.5215571	.5473730	.5729517
6	.1834452	.2016092	.2207058	.2407033	.2615627	.2832382	.3056772	.3288205
7	.0625719	.0711643	.0805763	.0908427	.1019949	.1140612	.1270655	.1410278
8	.0145738	.0171871	.0201696	.0235583	.0273918	.0317105	.0365560	.0419713
9	.0020658	.0025295	.0030809	.0037335	.0045022	.0054040	.0064574	.0076828
10	.0001342	.0001708	.0002161	.0002720	.0003405	.0004242	.0005260	.0006493
p	.49	.50						
1	.9988096	.9990234						
2	.9873722	.9892578						
3	.9779232	.9453125						
4	.8112268	.8281250						
5	.5982047	.6230469						
6	.3526028	.3769531						
7	.1559607	.1718750						
8	.0480073	.0546875						
9	.0091028	.0107422						
10	.0007979	.0009766						

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	.01	.02	.03	.04	.05	.06	.07	.08
1	.1046617	.1992666	.2846986	.3617607	.4311999	.4937018	.5498965	.6001626
2	.0051797	.0195126	.0413486	.0692343	.1018946	.1382158	.1772301	.2181008
3	.0001554	.0011702	.0037172	.0082313	.0152153	.0247624	.0369793	.0519000
4	.0000031	.0000472	.0002356	.0006734	.0015523	.0030378	.0053098	.0085433
5		.0000013	.0000094	.0000386	.0001119	.0002644	.0005423	.0010010
6			.0000003	.0000016	.0000058	.0000166	.0000399	.0000850
7					.0000002	.0000007	.0000021	.0000062
8							.0000001	.0000002
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AMCP 706-109

$$F(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 12

	.01	.02	.03	.04	.05	.06	.07	.08
1	.1136151	.2152833	.3061576	.3872902	.4596399	.5240797	.5814037	.6323336
2	.0061745	.0231078	.0486491	.0809354	.1183599	.1595450	.2033367	.2486817
3	.0002056	.0015370	.0048461	.0107290	.0195683	.0315700	.0467968	.0651960
4	.0000046	.0000696	.0003304	.0009782	.0022364	.0043413	.0075266	.0120118
5	.0000001	.0000023	.0000161	.0000640	.0001839	.0004308	.0008760	.0016662
6		.0000001	.0000006	.0000031	.0000111	.0000314	.0000751	.0001584
7				.0000001	.0000005	.0000017	.0000048	.0000116
8						.0000001	.0000002	.0000006
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AMCP 706-109

n = 12

$$P(c, n, p) = \sum_{r=0}^c \binom{n}{r} p^r (1-p)^{n-r}$$

	.49	.50
10	.0162820	.0192871
11	.0025044	.0031738
12	.0001914	.0002441

AMCP 706-109

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 12

	.01	.02	.03	.04	.05	.06	.07	.08
1	.1224790	.2309776	.3269729	.4117986	.4866579	.5526349	.6107054	.6617469
2	.0078489	.0269513	.0563744	.0931896	.1354239	.1814171	.2297828	.2793739
3	.0002653	.0019684	.0061602	.0135373	.0245078	.0392485	.0577538	.0793749
4	.0000067	.0000990	.0004658	.0013682	.0031030	.0057750	.0093755	.0138265
5	.0000001	.0000036	.0000256	.00001006	.00002866	.00006654	.00013416	.00024386
6		.0000001	.0000010	.0000055	.0000197	.0000554	.0001312	.0002743
7				.0000002	.0000010	.0000035	.0000097	.0000233
8						.0000002	.0000005	.0000015
9								.0000001
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AMCP 706-109

$$F(x, y, z) = \sum_{n=0}^{\infty} \binom{n}{y} x^n (1-x)^{n-y}$$

TABLE 1

x	.49	.50
1	.9998421	.9998778
2	.9978698	.9982910
3	.9864998	.9887693
4	.9464449	.9578574
5	.8507345	.8665771
6	.6818471	.7094727
7	.4706973	.5000000
8	.2659063	.2905273
9	.1183363	.1334229
10	.0395680	.0461426
11	.0092962	.0112305
12	.0013641	.0017090
13	.0000939	.0001221

AMCP 706-109

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 14

	.01	.02	.03	.04	.05	.06	.07	.08
1	.1312542	.2469581	.3471637	.4353267	.5123250	.5794768	.6379561	.6888078
2	.0084012	.0310310	.0644923	.1059339	.1529656	.2036901	.2544474	.3099637
3	.0003351	.0024681	.0076667	.0167234	.0300536	.0477786	.0697953	.0958348
4	.0000092	.0001364	.0006367	.0018550	.0041732	.0079714	.0135990	.0213552
5	.0000002	.0000055	.0000388	.0001513	.0004274	.0009840	.0019669	.0038449
6		.0000002	.0000018	.0000093	.0000331	.0000920	.0002159	.0004474
7			.0000001	.0000004	.0000020	.0000066	.0000182	.0000434
8					.0000001	.0000004	.0000018	.0000032
9							.0000001	.0000002
10								
11								
12								
13								
14								
	.09	.10	.11	.12	.13	.14	.15	.16
1	.7329580	.7712321	.8043589	.8329843	.8576788	.8789462	.8972303	.9127217
2	.3632077	.4153709	.4658339	.5141360	.5599495	.6030562	.6433288	.6807129
3	.1855110	.1583600	.1308727	.10315205	.07707755	.05311261	.0320888	.0152162
4	.0314771	.0441329	.0594200	.0773666	.0979359	.1210321	.1465076	.1741711
5	.0059020	.0093302	.0137212	.0195509	.0269128	.0359319	.0467403	.0594332
6	.0006432	.0014741	.0024249	.0037932	.0056875	.0082248	.0115283	.0157236
7	.0000927	.0001814	.0003306	.0005484	.0009301	.0014592	.0022075	.0032351
8	.0000078	.0000172	.0000348	.0000658	.0001176	.0002004	.0003276	.0005165
9	.0000005	.0000013	.0000028	.0000058	.0000114	.0000211	.0000374	.0000634
10		.0000001	.0000002	.0000004	.0000008	.0000017	.0000032	.0000059
11						.0000001	.0000002	.0000004
12								
13								
14								
	.17	.18	.19	.20	.21	.22	.23	.24
1	.9263635	.9378568	.9476652	.9560195	.9631210	.9691451	.9742445	.9785518
2	.7152130	.7468799	.7758005	.8020879	.8258750	.8473077	.8665396	.8837283
3	.4341029	.4733887	.5137597	.5519490	.5887349	.6239392	.6574244	.6890906
4	.2037959	.2351280	.2678943	.3018101	.3368559	.3719336	.4075723	.4433225
5	.0740748	.0906963	.1092960	.1298396	.1524618	.1764678	.2023367	.2297241
6	.0209360	.0272872	.0348918	.0438544	.0542667	.0662051	.0797285	.0948767
7	.0046102	.0064086	.0087126	.0116099	.0151927	.0195554	.0247936	.0310016
8	.0007887	.0011708	.0016945	.0023972	.0033221	.0045182	.0060403	.0079489
9	.0001038	.0001647	.0002351	.0003319	.0004611	.0006207	.0008138	.0010579
10	.0000103	.0000175	.0000288	.0000460	.0000718	.0001092	.0001628	.0002381
11	.0000008	.0000014	.0000024	.0000041	.0000067	.0000108	.0000171	.0000263
12		.0000001	.0000001	.0000002	.0000004	.0000007	.0000012	.0000020
13						.0000001	.0000001	.0000001
14								
	.25	.26	.27	.28	.29	.30	.31	.32
1	.9821821	.9852346	.9877955	.9899387	.9917279	.9932178	.9944552	.9954801
2	.8990316	.9126050	.9245996	.9351604	.9444253	.9525244	.9595791	.9657023
3	.7188724	.7467347	.7726697	.7966930	.8188404	.8391642	.8577308	.8746170
4	.4786600	.5136196	.5478967	.5812994	.6136594	.6448326	.6746990	.7031623
5	.2584654	.2883801	.3192748	.3529478	.3893191	.4157958	.4405619	.4641279
6	.1116690	.1301036	.1501573	.1717755	.1949228	.2194842	.2453663	.2724491
7	.0382708	.0466877	.0563318	.0672741	.0795747	.0932819	.1084301	.1250393
8	.0103095	.0131924	.0166717	.0208246	.0257302	.0314685	.0381190	.0457600
9	.0021542	.0028949	.0038365	.0050189	.0064865	.0082885	.0104789	.0131156
10	.0003419	.0004829	.0006717	.0009211	.0012464	.0016657	.0022001	.0028742
11	.0000398	.0000592	.0000864	.0001243	.0001762	.0002465	.0003404	.0004645
12	.0000032	.0000050	.0000077	.0000116	.0000171	.0000253	.0000366	.0000521
13	.0000002	.0000003	.0000004	.0000007	.0000010	.0000016	.0000024	.0000036
14							.0000001	.0000001
	.33	.34	.35	.36	.37	.38	.39	.40
1	.9963268	.9970241	.9975960	.9980657	.9984484	.9987598	.9990123	.9992164
2	.9709980	.9735617	.9774805	.9828133	.9885691	.9947183	.9917171	.9919024
3	.8899081	.9036952	.9180734	.9271396	.9369909	.9457239	.9534326	.9602084
4	.7301488	.7556067	.7795043	.8018287	.8225839	.8417891	.8594769	.8756912
5	.5137585	.5458146	.5772770	.6079855	.6378075	.6666088	.6942842	.7207430
6	.3005978	.3296652	.3594937	.3899183	.4207686	.4518716	.4830542	.5141454
7	.1431135	.1626406	.1835919	.2059216	.2295576	.2544519	.2804811	.3075478
8	.0544656	.0643058	.0753446	.0876380	.1012332	.1161672	.1324652	.1501401
9	.0162610	.0199807	.0243434	.0294202	.0352836	.0420064	.0496614	.0583189
10	.0037162	.0047579	.0060353	.0075886	.0094620	.0117042	.0143677	.0175095
11	.0006268	.0008369	.0011062	.0014485	.0018795	.0024180	.0030854	.0039064
12	.0000735	.0001024	.0001411	.0001925	.0002601	.0003483	.0004624	.0006087
13	.0000053	.0000078	.0000112	.0000159	.0000224	.0000312	.0000431	.0000591
14	.0000002	.0000003	.0000004	.0000006	.0000009	.0000013	.0000019	.0000027
	.41	.42	.43	.44	.45	.46	.47	.48
1	.9993807	.9995125	.9996178	.9997017	.9997682	.9998207	.9998620	.9998943
2	.9933552	.9945700	.9955817	.9964204	.9971133	.9976827	.9981488	.9985284
3	.9661387	.9713065	.9757903	.9796633	.9829308	.9856446	.9878236	.9903331
4	.8904859	.9039224	.9160685	.9269976	.9367846	.9455074	.9532444	.9600736
5	.7459180	.7697352	.7921731	.8132021	.8328139	.8510137	.8678196	.8832610
6	.5449790	.5753951	.6052426	.6343907	.6626800	.6900843	.7163113	.7414538
7	.3353318	.3643015	.3937161	.4236268	.4538793	.4843158	.5147768	.5451038
8	.1691911	.1896034	.2113473	.2343784	.2586371	.2840492	.3105862	.3379660
9	.0680476	.0789110	.0909679	.1042701	.1188614	.1347765	.1520393	.1706643
10	.0211901	.0254733	.0304262	.0361181	.0426201	.0500043	.0583426	.0677063
11	.0049091	.0061252	.0075903	.0093442	.0114305	.0138976	.0167797	.0201881
12	.0007950	.0010304	.0013259	.0016943	.0021510	.0027130	.0034009	.0042380
13	.0000802	.0001081	.0001445	.0001918	.0002529	.0003312	.0004309	.0005572
14	.0000038	.0000053	.0000074	.0000102	.0000140	.0000190	.0000257	.0000345

$$P(a, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

AMCP 706-109
n = 14

X	.49	.50
1	.99999195	.9999390
2	.99988363	.9990845
3	.9920711	.9935303
4	.9660710	.9713135
5	.8973774	.9102173
6	.7653749	.7880249
7	.5751407	.6047363
8	.3662539	.3982637
9	.1906456	.2119751
10	.0781644	.0897837
11	.0241294	.0286865
12	.0052508	.0064697
13	.0007163	.0009155
14	.0000460	.0000610

AMCP 706-109

$$Z(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 15

	.01	.02	.03	.04	.05	.06	.07	.08
1	.1399416	.2614309	.3667488	.4579136	.5367088	.6047088	.6632991	.7137026
2	.0094298	.0353383	.0729725	.1191096	.1709585	.2262373	.2831530	.3407118
3	.0004158	.0030354	.0093714	.0202918	.0362002	.0571333	.0836610	.1129651
4	.0000125	.0001830	.0008476	.0024497	.0054673	.0103599	.0175327	.0273116
5	.0000003	.0000081	.0000567	.0002194	.0006147	.0014033	.0027012	.0046977
6		.0000003	.0000029	.0000150	.0000528	.0001455	.0003385	.0006952
7			.0000001	.0000008	.0000035	.0000117	.0000320	.0000757
8					.0000002	.0000007	.0000024	.0000065
9							.0000001	.0000004
10								
11								
12								
13								
14								
15								
	.09	.10	.11	.12	.13	.14	.15	.16
1	.7569918	.7941089	.8258794	.8530261	.8761806	.8958938	.9126458	.9268542
2	.3964852	.4509570	.5030716	.5523978	.5986543	.6416808	.6814140	.7188663
3	.1469037	.1840611	.2237884	.2654344	.3083681	.3519964	.3957748	.4392157
4	.0399402	.0555556	.0742098	.0958651	.1204051	.1476453	.1773448	.2098113
5	.0082037	.0127205	.0187481	.0264959	.0361458	.0478459	.0617054	.0777913
6	.0011985	.0022497	.0036675	.0056851	.0084468	.0131038	.0168101	.0227171
7	.0001602	.0003106	.0005610	.0009554	.0015485	.0024064	.0036056	.0052032
8	.0000158	.0000336	.0000673	.0001261	.0002233	.0003767	.0006096	.0009515
9	.0000012	.0000028	.0000063	.0000130	.0000252	.0000462	.0000804	.0001359
10	.0000001	.0000002	.0000005	.0000010	.0000022	.0000044	.0000083	.0000151
11				.0000001	.0000001	.0000003	.0000007	.0000013
12								.0000001
13								
14								
15								
	.17	.18	.19	.20	.21	.22	.23	.24
1	.9388817	.9490425	.9576088	.9648156	.9708656	.9759332	.9801683	.9836994
2	.7511085	.7812558	.8084548	.8328742	.8546967	.8741119	.8913117	.9064860
3	.4818916	.5234371	.5635475	.6019768	.6385343	.6730802	.7055809	.7358037
4	.2429481	.2781949	.3146808	.3518379	.3895372	.4277349	.4659383	.5028684
5	.0961274	.1166940	.1394297	.1642377	.1909698	.2194703	.2495409	.2808361
6	.0299696	.0387009	.0490286	.0610514	.0748456	.0904629	.1079284	.1272400
7	.0073856	.0101668	.0136866	.0180588	.0233982	.0298183	.0374386	.0463316
8	.0014384	.0021136	.0030279	.0042397	.0058149	.0078264	.0103536	.0134615
9	.0002203	.0003458	.0005277	.0007850	.0011409	.0016335	.0022668	.0030598
10	.0000262	.0000140	.00000716	.00001132	.0001745	.0002628	.0003873	.0005599
11	.0000024	.0000043	.0000074	.0000125	.0000204	.0000325	.0000506	.0000771
12	.0000003	.0000003	.0000006	.0000010	.0000018	.0000030	.0000049	.0000079
13				.0000001	.0000001	.0000003	.0000003	.0000006
14								
15								
	.25	.26	.27	.28	.29	.30	.31	.32
1	.9865365	.9890736	.9910907	.9927556	.9941268	.9952524	.9961741	.9969865
2	.9198192	.9314887	.9416825	.9504903	.9581431	.9647324	.9703907	.9752318
3	.7639122	.7898610	.8136908	.8354639	.8552600	.8731723	.8893037	.9037642
4	.5387131	.5742295	.6085854	.6416096	.6731619	.7031321	.7314388	.7580276
5	.3135141	.3469423	.3810027	.4154462	.4501275	.4845089	.5186644	.5528221
6	.1483601	.1712555	.1958190	.2219509	.2495208	.2783786	.3083569	.3392749
7	.0566203	.0683758	.0816647	.0965373	.1130757	.1311486	.1508003	.1721044
8	.0178998	.0219012	.0273800	.0338305	.0413451	.0500125	.0599186	.0711294
9	.0041930	.0055723	.0073020	.0094445	.0120671	.0152425	.0190474	.0235618
10	.0007949	.0011100	.0015262	.0020688	.0027660	.0036525	.0047465	.0060515
11	.0001153	.0001693	.0002444	.0003474	.0004866	.0006722	.0009169	.0012356
12	.0000124	.0000191	.0000290	.0000432	.0000634	.0000917	.0001307	.0001841
13	.0000009	.0000015	.0000024	.0000037	.0000058	.0000087	.0000130	.0000192
14		.0000001	.0000001	.0000002	.0000003	.0000005	.0000008	.0000012
15								
	.33	.34	.35	.36	.37	.38	.39	.40
1	.9975389	.9980359	.9984379	.9987621	.9990225	.9992311	.9993975	.9995298
2	.9793565	.9828889	.9858212	.9883169	.9904114	.9922621	.9939196	.9954280
3	.9166677	.9281298	.9382639	.9471099	.9550100	.9618338	.9677609	.9728860
4	.7828694	.8059568	.8273035	.8469402	.8649145	.8812843	.8961196	.9094981
5	.5851673	.6171439	.6480566	.6777782	.7061748	.7331773	.7587093	.7827223
6	.3709408	.4031560	.4357179	.4684236	.5010730	.5334717	.5654339	.5968644
7	.1950833	.2194290	.2451575	.2721604	.3003120	.3294714	.3594846	.3901868
8	.0831194	.0977397	.1132311	.1297201	.1471170	.1654154	.1845194	.2043302
9	.0286685	.0350512	.0421938	.0500376	.0586849	.0681875	.0785548	.0897044
10	.0078560	.0099137	.0124432	.0154480	.0190160	.0232190	.0281322	.0336333
11	.0016463	.0021700	.0028314	.0036589	.0046680	.0059467	.0074855	.0093477
12	.0002561	.0003321	.0004789	.0006447	.0008593	.0011348	.0014854	.0019278
13	.0000276	.0000399	.0000566	.0000795	.0001104	.0001517	.0002066	.0002789
14	.0000019	.0000028	.0000042	.0000061	.0000088	.0000127	.0000180	.0000258
15	.0000001	.0000001	.0000001	.0000002	.0000003	.0000005	.0000007	.0000011
16								
	.41	.42	.43	.44	.45	.46	.47	.48
1	.9996346	.9997172	.9997832	.9998330	.9998725	.9999032	.9999269	.9999450
2	.9958257	.9966459	.9973172	.9978643	.9983080	.9986662	.9989540	.9991840
3	.9772975	.9810772	.9843006	.9870365	.9893476	.9912902	.9929149	.9942649
4	.9215035	.9322237	.9417491	.9501705	.9575787	.9640625	.9697081	.9745988
5	.8051873	.8260938	.8454483	.8632723	.8796007	.8944808	.9079492	.9201311
6	.6273613	.6370179	.6456287	.6532621	.6599402	.6656794	.6704808	.6753208
7	.4214851	.4329608	.4444725	.4560358	.4676539	.4793291	.4910641	.5028615
8	.2373908	.2529766	.2687659	.2847477	.3009261	.3173061	.3338924	.3506891
9	.1095164	.1254018	.1427310	.1615177	.1817603	.2034419	.2265281	.2510681
10	.0404016	.0479172	.0564592	.0661050	.0769287	.0889995	.1023801	.1171858
11	.0115843	.0142514	.0174098	.0211247	.0254659	.0303067	.0356339	.0415569
12	.0024818	.0031702	.0040196	.0050603	.0063268	.0078579	.0096975	.0118941
13	.0003733	.0004954	.0006525	.0008530	.0011070	.0014268	.0018168	.0022840
14	.0000351	.0000485	.0000663	.0000901	.0001215	.0001626	.0002161	.0002854
15	.0000016	.0000022	.0000032	.0000045	.0000063	.0000087	.0000121	.0000165

$$f(x) = \sum_{n=0}^{\infty} \frac{f^{(n)}(a)}{n!} (x-a)^n$$

AMCP 706-109

x	.49	.50
1	.9609509	.929695
2	.9993670	.9995117
3	.9993060	.9963074
4	.9798114	.9824319
5	.9116777	.9407654
6	.8300573	.8491211
7	.6603564	.6581806
8	.4686084	.5000000
9	.2786936	.3032144
10	.1332402	.1508789
11	.0506066	.0592346
12	.0145013	.0176781
13	.0029182	.0036926
14	.0003744	.0004883
15	.0000225	.0000108

AMCP 706-109

$$P(n, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 16

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.1483432	.1769033	.1857463	.1795971	.1592733	.1284257	.0886682	.7366061
2	.0109339	.0399608	.0817858	.1346618	.1892403	.2489456	.3097838	.3701457
3	.0005079	.0034654	.0112795	.0242445	.0429379	.0672796	.0966814	.1311494
4	.0000168	.0002401	.0011033	.0031634	.0070039	.0131663	.0231057	.0381657
5	.0000004	.0000116	.0000804	.0003066	.0008573	.0019407	.0038130	.0067578
6		.0000004	.0000045	.0000234	.0000809	.0002210	.0005095	.0010378
7			.0000002	.0000014	.0000060	.0000197	.0000636	.0001253
8				.0000001	.0000003	.0000014	.0000044	.0000120
9						.0000001	.0000003	.0000009
10								.0000001
x	.09	.10	.11	.12	.13	.14	.15	.16
1	.7788676	.8146980	.8450327	.8706630	.8922771	.9104686	.9257689	.9385575
2	.1483432	.1769033	.1857463	.1795971	.1592733	.1284257	.0886682	.7366061
3	.0109339	.0399608	.0817858	.1346618	.1892403	.2489456	.3097838	.3701457
4	.0005079	.0034654	.0112795	.0242445	.0429379	.0672796	.0966814	.1311494
5	.0000168	.0002401	.0011033	.0031634	.0070039	.0131663	.0231057	.0381657
6	.0000004	.0000116	.0000804	.0003066	.0008573	.0019407	.0038130	.0067578
7		.0000004	.0000045	.0000234	.0000809	.0002210	.0005095	.0010378
8			.0000002	.0000014	.0000060	.0000197	.0000636	.0001253
9				.0000001	.0000003	.0000014	.0000044	.0000120
10						.0000001	.0000003	.0000009
11								.0000001
x	.17	.18	.19	.20	.21	.22	.23	.24
1	.9492718	.9582149	.9656632	.9718535	.9769838	.9812279	.9847896	.9876115
2	.1483432	.1769033	.1857463	.1795971	.1592733	.1284257	.0886682	.7366061
3	.0109339	.0399608	.0817858	.1346618	.1892403	.2489456	.3097838	.3701457
4	.0005079	.0034654	.0112795	.0242445	.0429379	.0672796	.0966814	.1311494
5	.0000168	.0002401	.0011033	.0031634	.0070039	.0131663	.0231057	.0381657
6	.0000004	.0000116	.0000804	.0003066	.0008573	.0019407	.0038130	.0067578
7		.0000004	.0000045	.0000234	.0000809	.0002210	.0005095	.0010378
8			.0000002	.0000014	.0000060	.0000197	.0000636	.0001253
9				.0000001	.0000003	.0000014	.0000044	.0000120
10						.0000001	.0000003	.0000009
11								.0000001
12								.0000001
x	.25	.26	.27	.28	.29	.30	.31	.32
1	.9899774	.9919145	.9934963	.9947842	.9958300	.9966767	.9973601	.9979100
2	.1483432	.1769033	.1857463	.1795971	.1592733	.1284257	.0886682	.7366061
3	.0109339	.0399608	.0817858	.1346618	.1892403	.2489456	.3097838	.3701457
4	.0005079	.0034654	.0112795	.0242445	.0429379	.0672796	.0966814	.1311494
5	.0000168	.0002401	.0011033	.0031634	.0070039	.0131663	.0231057	.0381657
6	.0000004	.0000116	.0000804	.0003066	.0008573	.0019407	.0038130	.0067578
7		.0000004	.0000045	.0000234	.0000809	.0002210	.0005095	.0010378
8			.0000002	.0000014	.0000060	.0000197	.0000636	.0001253
9				.0000001	.0000003	.0000014	.0000044	.0000120
10						.0000001	.0000003	.0000009
11								.0000001
12								.0000001
13								.0000001
14								.0000001
15								.0000001
x	.33	.34	.35	.36	.37	.38	.39	.40
1	.9993511	.9997037	.9998947	.9999807	.9999942	.9999993	.9999999	.9999999
2	.1483432	.1769033	.1857463	.1795971	.1592733	.1284257	.0886682	.7366061
3	.0109339	.0399608	.0817858	.1346618	.1892403	.2489456	.3097838	.3701457
4	.0005079	.0034654	.0112795	.0242445	.0429379	.0672796	.0966814	.1311494
5	.0000168	.0002401	.0011033	.0031634	.0070039	.0131663	.0231057	.0381657
6	.0000004	.0000116	.0000804	.0003066	.0008573	.0019407	.0038130	.0067578
7		.0000004	.0000045	.0000234	.0000809	.0002210	.0005095	.0010378
8			.0000002	.0000014	.0000060	.0000197	.0000636	.0001253
9				.0000001	.0000003	.0000014	.0000044	.0000120
10						.0000001	.0000003	.0000009
11								.0000001
12								.0000001
13								.0000001
14								.0000001
15								.0000001
x	.41	.42	.43	.44	.45	.46	.47	.48
1	.9997844	.9999360	.9999758	.9999908	.9999959	.9999977	.9999988	.9999994
2	.1483432	.1769033	.1857463	.1795971	.1592733	.1284257	.0886682	.7366061
3	.0109339	.0399608	.0817858	.1346618	.1892403	.2489456	.3097838	.3701457
4	.0005079	.0034654	.0112795	.0242445	.0429379	.0672796	.0966814	.1311494
5	.0000168	.0002401	.0011033	.0031634	.0070039	.0131663	.0231057	.0381657
6	.0000004	.0000116	.0000804	.0003066	.0008573	.0019407	.0038130	.0067578
7		.0000004	.0000045	.0000234	.0000809	.0002210	.0005095	.0010378
8			.0000002	.0000014	.0000060	.0000197	.0000636	.0001253
9				.0000001	.0000003	.0000014	.0000044	.0000120
10						.0000001	.0000003	.0000009
11								.0000001
12								.0000001
13								.0000001
14								.0000001
15								.0000001

$$P(r, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

AMCP 706-109
n = 16

	.41	.42	.43	.44	.45	.46	.47	.48
12	.0062138	.0078243	.0097774	.0121287	.0149394	.0182764	.0222119	.0268334
13	.0015777	.0016189	.0021004	.0037042	.0034859	.0043851	.0055860	.0069176
14	.0001738	.0002362	.0003184	.0004858	.0005650	.0007441	.0009731	.0012419
15	.0000153	.0000217	.0000303	.0000402	.0000561	.0000795	.0001060	.0001456
16	.0000006	.0000009	.0000014	.0000020	.0000028	.0000040	.0000057	.0000079

	.49	.50
1	.0009701	.0009847
2	.0096570	.0097406
3	.0097367	.0097095
4	.0069330	.0069166
5	.0044468	.0044506
6	.0035377	.0035432
7	.0025898	.0025750
8	.0018449	.0018190
9	.0013119	.0013007
10	.0009530	.0009249
11	.0006166	.0005568
12	.0003122	.0002464
13	.0001041	.0000634
14	.0000307	.0000190
15	.0000050	.0000024
16	.0000010	.0000013

AMCP 706-109

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 17

	.01	.02	.03	.04	.05	.06	.07	.08
1	.1570568	.2906782	.4041740	.5004132	.5818797	.6507202	.7087874	.7576779
2	.0133090	.0445870	.0909046	.1465392	.2077720	.2717144	.3361606	.3994626
3	.0006122	.0044088	.0133946	.0285812	.0502530	.0781795	.1117831	.1502693
4	.0000214	.0003090	.0014086	.0040066	.0088006	.0164131	.0273400	.0419244
5	.0000006	.0000162	.0001111	.0004228	.0011646	.0026142	.0050942	.0089499
6		.0000007	.0000068	.0000346	.0001297	.0003242	.0007408	.0014948
7			.0000003	.0000022	.0000097	.0000318	.0000854	.0001982
8				.0000001	.0000006	.0000025	.0000079	.0000211
9						.0000002	.0000006	.0000018
10								.0000001
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$$P(n, r, t) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k} t^k$$

AMCP 706-109

λ	.41	.42	.43	.44	.45	.46	.47	.48
9	.2210105	.2502097	.2780325	.3071557	.3374356	.3687099	.4008001	.4335145
10	.1069532	.1236042	.1410880	.1618231	.1834078	.2066202	.2314160	.2577291
11	.0419885	.0502503	.0597237	.0704711	.0825896	.0961590	.1112492	.1279103
12	.0132599	.0164623	.0202795	.0247951	.0300975	.0362794	.0434164	.0516659
13	.0032779	.0042252	.0054015	.0068310	.0086235	.0107751	.0133684	.0164724
14	.0006100	.0008159	.0010847	.0014203	.0018459	.0024130	.0031130	.0039777
15	.0000803	.0001118	.0001542	.0002110	.0002862	.0003852	.0005146	.0006824
16	.0000067	.0000093	.0000138	.0000197	.0000277	.0000387	.0000537	.0000740
17	.0000003	.0000004	.0000006	.0000009	.0000013	.0000018	.0000027	.0000038
λ	.49	.50						
1	.9999893	.9999924						
2	.9998140	.9998627						
3	.9984737	.9982511						
4	.9920308	.9916371						
5	.9703650	.9754791						
6	.9162432	.9282684						
7	.8122443	.8318470						
8	.6552263	.6854706						
9	.4666509	.5000000						
10	.2854705	.3145294						
11	.1462103	.1661530						
12	.0610655	.0717316						
13	.0231626	.0245209						
14	.0050477	.0053529						
15	.0008985	.0011749						
16	.0001012	.0001373						
17	.0000054	.0000076						

AMCP 706-109

$$P(n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 10

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.1654862	.3048647	.4220487	.5203967	.6027857	.6716770	.7291723	.7770636
2	.0137565	.0495088	.1003027	.1606942	.2284774	.2944547	.3622445	.4281198
3	.0007293	.0052124	.0157199	.0372995	.0681289	.0979216	.1274395	.1570248
4	.0000274	.0003910	.0017682	.0049826	.0108712	.0201191	.0332510	.0505920
5	.0000008	.0000221	.0001500	.0005662	.0015464	.0034421	.0066514	.0115878
6		.0000010	.0000099	.0000501	.0001720	.0004616	.0010455	.0020912
7			.0000005	.0000035	.0000152	.0000494	.0001313	.0003019
8				.0000002	.0000011	.0000043	.0000133	.0000352
9					.0000001	.0000003	.0000011	.0000033
10						.0000001	.0000001	.0000003
x	.09	.10	.11	.12	.13	.14	.15	.16
1	.8168761	.8499054	.8772504	.8994414	.9184645	.9337826	.9463536	.9564662
2	.4908753	.5497161	.6041670	.6539577	.6991623	.7397502	.7759473	.8080046
3	.2168196	.2662040	.3172760	.3690424	.4206231	.4712636	.5203380	.5673468
4	.0722628	.0981968	.1281643	.1613022	.1964556	.2315897	.2677645	.3028690
5	.0186497	.0281939	.0405143	.0558271	.0742617	.0956566	.1205614	.1482420
6	.0038030	.0064152	.0101814	.0153639	.0222206	.0309732	.0416964	.0551076
7	.0006216	.0011721	.0020586	.0034089	.0053720	.0081150	.0118185	.0166712
8	.0000822	.0001735	.0003375	.0006142	.0010561	.0017304	.0027194	.0041205
9	.0000088	.0000209	.0000451	.0000902	.0001644	.0003013	.0005115	.0008335
10	.0000008	.0000020	.0000049	.0000108	.0000222	.0000428	.0000786	.0001378
11	.0000001	.0000002	.0000004	.0000010	.0000024	.0000049	.0000098	.0000185
12				.0000001	.0000002	.0000005	.0000010	.0000020
13							.0000001	.0000002
x	.17	.18	.19	.20	.21	.22	.23	.24
1	.9650533	.9719037	.9774716	.9819856	.9856356	.9885790	.9909462	.9928444
2	.8362130	.8608890	.8823517	.9009208	.9169046	.9305957	.9422670	.9521706
3	.6119090	.6537518	.6926997	.7286581	.7616075	.7915843	.8186727	.8429936
4	.3688851	.4112497	.4554381	.4989745	.5414394	.5824731	.6217777	.6591164
5	.1786891	.2116291	.2467363	.2836462	.3219680	.3612978	.4012298	.4413671
6	.0707599	.0889355	.1096631	.1329163	.1586146	.1866260	.2167716	.2488310
7	.0228635	.0305812	.0399983	.0512710	.0645314	.0798822	.0973928	.1170957
8	.0060462	.0086221	.0119849	.0162901	.0216580	.0282690	.0362637	.0457803
9	.0013100	.0019942	.0029498	.0042520	.0059875	.0082534	.0111572	.0148145
10	.0002328	.0003776	.0005929	.0009109	.0013591	.0019805	.0028245	.0039492
11	.0000335	.0000582	.0000978	.0001591	.0002518	.0003881	.0005645	.0008612
12	.0000039	.0000072	.0000130	.0000225	.0000377	.0000615	.0000978	.0001520
13	.0000004	.0000007	.0000014	.0000025	.0000045	.0000078	.0000130	.0000214
14		.0000001	.0000001	.0000002	.0000004	.0000008	.0000014	.0000023
15					.0000001	.0000001	.0000001	.0000002
x	.25	.26	.27	.28	.29	.30	.31	.32
1	.9943623	.9955724	.9965141	.9972961	.9978979	.9983716	.9987431	.9990336
2	.9605360	.9675706	.9734600	.9783691	.9824431	.9858095	.9885791	.9908475
3	.8546950	.8839438	.9009188	.9158047	.9287868	.9404478	.9507640	.9598104
4	.6943108	.7272377	.7578239	.7860414	.8119017	.8354455	.8567579	.8759219
5	.4813307	.5207667	.5503531	.5668033	.5828698	.6005451	.6198627	.6398958
6	.2825492	.3176440	.3538135	.3907441	.4281179	.4656199	.5029448	.5398027
7	.1398848	.1630145	.1891003	.2171201	.2469172	.2783036	.3110643	.3449625
8	.0593480	.0698786	.0846637	.1013708	.1200403	.1406835	.1632806	.1877806
9	.0193478	.0248839	.0315513	.0394771	.0487838	.0595859	.0719867	.0860746
10	.0054218	.0073184	.0097243	.0127329	.0164451	.0209680	.0264132	.0328950
11	.0012440	.0017639	.0024586	.0033724	.0045572	.0060725	.0079857	.0103719
12	.0002312	.0003446	.0005042	.0007250	.0010259	.0014298	.0019464	.0026635
13	.0000342	.0000537	.0000825	.0001244	.0001845	.0002691	.0003866	.0005474
14	.0000039	.0000065	.0000105	.0000166	.0000259	.0000395	.0000594	.0000878
15	.0000003	.0000006	.0000010	.0000017	.0000027	.0000044	.0000068	.0000106
16			.0000001	.0000001	.0000002	.0000003	.0000006	.0000009
x	.33	.34	.35	.36	.37	.38	.39	.40
1	.9992598	.9994353	.9995710	.9996755	.9997556	.9998167	.9998632	.9998984
2	.9926975	.9941994	.9954132	.9963897	.9971718	.9977951	.9982895	.9986797
3	.9652238	.9712721	.9768831	.9806797	.9826231	.9837627	.9841369	.9847736
4	.8930543	.9082800	.9217325	.9335498	.9438711	.9528343	.9605759	.9672187
5	.7597560	.7865908	.8113804	.8341350	.8548903	.8737047	.8906545	.9058114
6	.5759238	.6110632	.6450034	.6775566	.7085664	.7379079	.7654874	.7912416
7	.3797447	.4151462	.4508969	.4867268	.5227112	.5575756	.5921001	.6257231
8	.2141009	.2421285	.2717216	.3027123	.3349094	.3681021	.4020644	.4365592
9	.1019205	.1195743	.1390631	.1603886	.1835265	.2084248	.2350043	.2631588
10	.0405282	.0494254	.0596947	.0714363	.0847405	.0996840	.1163278	.1347141
11	.0133140	.0169019	.0212315	.0264042	.0325250	.0397012	.0480401	.0576473
12	.0035657	.0047167	.0061690	.0079820	.0102223	.0129640	.0162879	.0202016
13	.0007648	.0010351	.0013379	.0017372	.0022816	.0030447	.0040459	.0053155
14	.0001281	.0001704	.0002267	.0003079	.0004105	.0005406	.0007051	.0009124
15	.0000161	.0000243	.0000360	.0000526	.0000761	.0001087	.0001536	.0002148
16	.0000014	.0000023	.0000035	.0000053	.0000080	.0000119	.0000176	.0000256
17	.0000001	.0000001	.0000002	.0000003	.0000005	.0000008	.0000013	.0000019
18							.0000001	.0000001
x	.41	.42	.43	.44	.45	.46	.47	.48
1	.9999250	.9999448	.9999597	.9999707	.9999788	.9999848	.9999891	.9999923
2	.9988962	.9992337	.9994119	.9995558	.9996664	.9997510	.9998153	.9998639
3	.9934414	.9947294	.9959933	.9967850	.9974941	.9980586	.9985052	.9988364
4	.9728909	.9777049	.9817668	.9857140	.9880150	.9903696	.9923091	.9938966
5	.9193377	.9312843	.9417868	.9509631	.9589313	.9658075	.9717040	.9767281
6	.8151360	.8371626	.8573377	.8756991	.8923033	.9078224	.9205411	.9323540

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

AMCP 706-109
n = 18

λ	.41	.42	.43	.44	.45	.46	.47	.48
7	.6382447	.6894889	.7193055	.7475712	.7741900	.7990930	.8223375	.8436059
8	.4713437	.5061698	.5407976	.5749906	.6085245	.6411898	.6727950	.7031693
9	.2927563	.3236408	.3556348	.3885420	.4221509	.4562384	.4905737	.5249229
10	.1548647	.1767785	.2004302	.2257694	.2527203	.2811814	.3110266	.3421061
11	.0686241	.0810647	.0950544	.1106660	.1279578	.1469711	.1677276	.1902275
12	.0250386	.0306575	.0372405	.0448925	.0537190	.0638240	.0753084	.0882670
13	.0073705	.0093648	.0117991	.0147464	.0182868	.0225071	.0275003	.0333653
14	.0017038	.0022484	.0029409	.0038143	.0049068	.0062638	.0079330	.0099751
15	.0002975	.0004079	.0005543	.0007466	.0009971	.0013208	.0017358	.0022641
16	.0000368	.0000525	.0000742	.0001032	.0001440	.0001981	.0002703	.0003660
17	.0000029	.0000043	.0000063	.0000091	.0000132	.0000188	.0000267	.0000375
18	.0000001	.0000002	.0000003	.0000004	.0000006	.0000009	.0000013	.0000018
λ	.49	.50						
1	.9999946	.9999962						
2	.9999003	.9999275						
3	.9991308	.9993439						
4	.9951878	.9962311						
5	.9809813	.9845581						
6	.9427629	.9518738						
7	.8632037	.8810577						
8	.7321651	.7596588						
9	.5590529	.5927353						
10	.3742489	.4072647						
11	.2144478	.2403412						
12	.1027865	.1189423						
13	.0402050	.0481262						
14	.0124540	.0154419						
15	.0029316	.0037689						
16	.0004918	.0006561						
17	.0000523	.0000725						
18	.0000027	.0000038						

AMCP 706-109

$$P(o, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 13

	.01	.02	.03	.04	.05	.06	.07	.08
1	.1738314	.3187674	.4393873	.5395808	.6226464	.6913763	.7481302	.7948986
2	.0152734	.0544610	.1099551	.1750823	.2452928	.3170881	.3879294	.4560353
3	.0008594	.0060983	.0188257	.0383953	.0665464	.1020714	.1439224	.1908380
4	.0000344	.0004875	.0021867	.0061220	.0132360	.0242994	.0398477	.0601036
5	.0000010	.0000624	.0001986	.0007431	.0020128	.0044427	.0085134	.0147082
6		.0000014	.0000141	.0000708	.0002407	.0006404	.0014379	.0028509
7		.0000001	.0000008	.0000054	.0000231	.0000741	.0001953	.0004451
8				.0000003	.0000018	.0000070	.0000216	.0000566
9					.0000001	.0000005	.0000019	.0000058
10							.0000001	.0000005
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$$F(x, a, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

AMCP 706-109

	.41	.42	.43	.44	.45	.46	.47	.48
1	.9999557	.9999600	.9999770	.9999836	.9999883	.9999918	.9999942	.9999960
2	.9993711	.9995277	.9996474	.9997183	.9998070	.9998585	.9998970	.9999258
3	.9957147	.9965885	.9974097	.9980041	.9984717	.9988371	.9991210	.9993400
4	.9813166	.9848846	.9878138	.9902828	.9922806	.9939065	.9952213	.9962773
5	.9412945	.9507810	.9589782	.9660159	.9720190	.9771061	.9813884	.9849490
6	.8574507	.8766237	.8936508	.9088153	.9222859	.9341715	.9445876	.9536536
7	.7225701	.7515118	.7786593	.8039475	.8273410	.8488325	.8684402	.8862050
8	.5479725	.5811638	.6175560	.6509261	.6830740	.7138253	.7430330	.7705789
9	.3659768	.4003030	.4352548	.4705794	.5061190	.5413160	.5762177	.6104812
10	.2111003	.2384607	.2671682	.2973864	.3289641	.3617076	.3954137	.4298582
11	.1039827	.1212645	.1403660	.1613115	.1841009	.2087079	.2350781	.2631292
12	.0429087	.0518285	.0621005	.0738326	.0871264	.1020717	.1187464	.1372081
13	.0146145	.0183077	.0227389	.0280107	.0342313	.0415129	.0499701	.0597181
14	.0040272	.0052373	.0067429	.0086244	.0109278	.0137352	.0171297	.0212024
15	.0008741	.0011809	.0015805	.0020964	.0027564	.0035941	.0046483	.0059654
16	.0001437	.0002018	.0002806	.0003866	.0005279	.0007145	.0009591	.0012771
17	.0000188	.0000245	.0000355	.0000508	.0000721	.0001013	.0001412	.0001952
18	.0000012	.0000019	.0000028	.0000042	.0000062	.0000091	.0000132	.0000190
19	.0000001	.0000001	.0000001	.0000002	.0000003	.0000004	.0000006	.0000009
	.49	.50						
1	.9999072	.9999981						
2	.9999465	.9999610						
3	.9995070	.9995357						
4	.9971199	.9971875						
5	.9879425	.9903946						
6	.9614892	.9682159						
7	.9021877	.9164658						
8	.7963740	.8203863						
9	.6438774	.6761971						
10	.4648028	.5000000						
11	.2927504	.3238029						
12	.1575005	.1796417						
13	.0708699	.0835342						
14	.0260520	.0317841						
15	.0075976	.0096054						
16	.0016873	.0022125						
17	.0003677	.0005643						
18	.0000527	.0000781						
19	.0000013	.0000019						

AMCP 706-109

$$P(n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 20

	.01	.02	.03	.04	.05	.06	.07	.08
1	.1820931	.3385920	.4562057	.5379976	.6415141	.7095938	.7657611	.8113067
2	.0168593	.0894990	.1198380	.1896622	.2841608	.3395454	.4131435	.4831444
3	.0010036	.0070897	.0213084	.0438628	.0754837	.1149724	.1610029	.2120538
4	.0000426	.0005997	.0026668	.0074129	.0159015	.0289657	.0471329	.0706152
5	.0000014	.0000366	.0000862	.0000953	.0002739	.0005634	.0010706	.0018344
6		.0000019	.0000196	.0000977	.0003293	.0008685	.0019534	.0037995
7		.0000001	.0000032	.0000080	.0000339	.0001081	.0002888	.0006375
8			.0000001	.0000005	.0000002	.0000011	.0000037	.0000876
9						.0000009	.0000033	.0000899
10						.0000001	.0000003	.0000009
11								.0000001
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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

AMCP 706-109

n = 20

x	.41	.42	.43	.44	.45	.46	.47	.48
1	.9999739	.9999814	.9999869	.9999908	.9999936	.9999956	.9999969	.9999979
2	.99996106	.99997127	.99997891	.99998462	.9999886	.99999198	.99999427	.99999593
3	.99972139	.9978636	.9983719	.9987672	.9990726	.9993070	.9994857	.9996210
4	.9872198	.9898296	.9919571	.9936802	.9950666	.9961746	.9970541	.9977474
5	.9577036	.9651045	.9713904	.9766934	.9811367	.9848343	.9878898	.9903970
6	.8920674	.9078104	.9217416	.9339636	.9446658	.9539214	.9618840	.9686850
7	.7780385	.8040882	.8281057	.8500893	.8700662	.8880885	.9042295	.9185803
8	.6195576	.6538700	.6868304	.7182555	.7479941	.7759286	.8019744	.8260794
9	.4405950	.4771045	.5136443	.5499319	.5856938	.6206703	.6548209	.6873881
10	.2747746	.3064344	.3394454	.3735930	.4086388	.4443275	.4803916	.5165572
11	.1480239	.1704069	.1948909	.2211658	.2492894	.2790876	.3104359	.3431391
12	.0679490	.0809916	.0957546	.1123214	.1307650	.1511243	.1734218	.1976508
13	.0262151	.0323865	.0396644	.0481724	.0580341	.0693699	.0822945	.0969133
14	.0081680	.0107269	.0136252	.0171544	.0214144	.0265129	.0325647	.0396899
15	.0021669	.0028846	.0038034	.0049687	.0064336	.0082590	.0105147	.0132798
16	.0004432	.0006130	.0008396	.0011389	.0015307	.0020391	.0026931	.0035275
17	.0000688	.0000990	.0001409	.0001986	.0002772	.0003834	.0005256	.0007145
18	.0000076	.0000114	.0000169	.0000247	.0000359	.0000515	.0000734	.0001035
19	.0000005	.0000008	.0000013	.0000020	.0000030	.0000044	.0000065	.0000096
20				.0000001	.0000001	.0000002	.0000003	.0000004

x	.49	.50
1	.9999986	.9999990
2	.9999714	.9999800
3	.9997228	.9997986
4	.9982900	.9987116
5	.9924394	.9940910
6	.9744516	.9793053
7	.9312459	.9421409
8	.8432227	.8684120
9	.7106010	.7482777
10	.5525496	.5880985
11	.3770361	.4119015
12	.2217730	.2517223
13	.1133189	.1315880
14	.0480128	.0576591
15	.0166402	.0206947
16	.0045033	.0059090
17	.0009633	.0012884
18	.0001444	.0002012
19	.0000139	.0000200
20	.0000006	.0000010

AMCP 706-109

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 21

	.01	.02	.03	.04	.05	.06	.07	.08
1	.1902721	.3457442	.4785195	.5756777	.6594384	.7273001	.7821578	.8264021
2	.0185117	.0653488	.1299291	.2043956	.2830282	.3617663	.4378267	.5093973
3	.0011621	.0081253	.0239732	.0496948	.0849175	.1284468	.1786327	.2337410
4	.0000523	.0007294	.0031136	.0086709	.0188802	.0341261	.0551038	.0819303
5	.0000018	.0000498	.0003305	.0012165	.0032403	.0070340	.0132566	.0225261
6		.0000027	.0000268	.0001321	.0004415	.0011545	.0025473	.0049631
7		.0000001	.0000018	.0000116	.0000487	.0001537	.0003978	.0008905
8			.0000001	.0000008	.0000044	.0000168	.0000511	.0001316
9					.0000003	.0000015	.0000005	.0000168
10						.0000001	.0000000	.0000017
11								.0000001

	.09	.10	.11	.12	.13	.14	.15	.16
1	.8628031	.8905816	.9134653	.9317447	.9453087	.9578820	.9670544	.9743040
2	.5753948	.5352700	.4888641	.4362365	.3778289	.3139973	.2449619	.1715202
3	.2919349	.2315913	.1626711	.0957325	.0326076	.0079036	.0025048	.0007413
4	.1143835	.0519653	.0193721	.005641	.0013101	.0002419	.0000592	.0000137
5	.0353633	.0091524	.0021169	.0003121	.0000729	.0000166	.0000034	.0000008
6	.0087917	.0144453	.0223306	.0328222	.0462388	.0628259	.0827348	.1060231
7	.0017838	.0032738	.0055921	.0090082	.0138088	.0204740	.0293412	.0408195
8	.0002986	.0006127	.0011519	.0020494	.0034245	.0054517	.0083232	.0122509
9	.0000415	.0000954	.0002001	.0003888	.0007091	.0012246	.0020177	.0031908
10	.0000048	.0000124	.0000289	.0000617	.0001230	.0002306	.0004105	.0006981
11	.0000005	.0000014	.0000035	.0000082	.0000179	.0000364	.0000701	.0001283
12		.0000001	.0000004	.0000007	.0000022	.0000048	.0000100	.0000198
13				.0000001	.0000002	.0000005	.0000012	.0000025
14							.0000001	.0000003

	.17	.18	.19	.20	.21	.22	.23	.24
1	.9800180	.9845086	.9880275	.9907766	.9929178	.9945802	.9958666	.9968589
2	.8940711	.9130970	.9290318	.9423539	.9533829	.9624780	.9699391	.9760282
3	.7180351	.7353988	.7507336	.7642972	.7763335	.7869917	.7964913	.8050473
4	.4896837	.5384070	.5851990	.6296240	.6713619	.7101916	.7459828	.7786654
5	.2792151	.3231360	.3682669	.4139916	.4597199	.5049038	.5490501	.5917291
6	.1326478	.1624688	.1952568	.2307041	.2684384	.3080381	.3490483	.3909970
7	.0525949	.0684137	.0870365	.1085125	.1329465	.1609681	.1921895	.2261895
8	.0174599	.0241806	.0326401	.0430522	.0556105	.0704753	.0877701	.1075732
9	.0048663	.0071863	.0103107	.0144140	.0196812	.0263026	.0344679	.0443557
10	.0011404	.0017978	.0027450	.0040722	.0058855	.0083063	.0114703	.0156255
11	.0002247	.0003784	.0006154	.0009697	.0014848	.0022152	.0032270	.0045989
12	.0000371	.0000669	.0001159	.0001941	.0003151	.0004972	.0007647	.0011483
13	.0000051	.0000099	.0000182	.0000325	.0000559	.0000934	.0001518	.0002403
14	.0000006	.0000012	.0000024	.0000045	.0000082	.0000146	.0000250	.0000418
15	.0000001	.0000001	.0000003	.0000005	.0000010	.0000019	.0000034	.0000060
16					.0000001	.0000002	.0000004	.0000007
17								.0000001

	.25	.26	.27	.28	.29	.30	.31	.32
1	.9976216	.9982058	.9986517	.9989908	.9992476	.9994415	.9995871	.9996961
2	.9809727	.9849677	.9881795	.9907489	.9927943	.9944145	.9956916	.9966932
3	.9254765	.9384553	.9544465	.9728971	.9928706	.9948706	.9968706	.9985617
4	.8083179	.8344547	.8587157	.8797854	.8982495	.9143943	.9283911	.9404442
5	.6325799	.6713120	.7077050	.7416053	.7729215	.8016185	.8277106	.8512543
6	.4334101	.4758252	.5178038	.5589412	.5989745	.6372881	.6739175	.7085505
7	.2563704	.2926665	.3305040	.3695118	.4093021	.4494819	.4896629	.5294712
8	.1299134	.1547870	.1820570	.2116539	.2431786	.2770068	.3122749	.3489971
9	.0561468	.0699775	.0859732	.1042229	.1247784	.1476505	.1728668	.2001707
10	.0206296	.0269463	.0346407	.0438758	.0546061	.0675728	.0822986	.0996825
11	.0064227	.0088032	.0116575	.0157139	.0205093	.0263899	.0335028	.0419973
12	.0016871	.0024287	.0034309	.0047620	.0065015	.0087402	.0115803	.0151338
13	.0003716	.0005623	.0008336	.0012128	.0017334	.0024367	.0033723	.0045870
14	.0000681	.0001083	.0001626	.0002351	.0003381	.0004744	.0006494	.0008692
15	.0000102	.0000171	.0000280	.0000449	.0000704	.0001084	.0001640	.0002440
16	.0000012	.0000022	.0000038	.0000063	.0000104	.0000168	.0000265	.0000413
17	.0000001	.0000002	.0000004	.0000007	.0000012	.0000020	.0000034	.0000055
18				.0000001	.0000001	.0000002	.0000003	.0000006

	.33	.34	.35	.36	.37	.38	.39	.40
1	.9999774	.9998377	.9996822	.9995149	.9993389	.9991551	.9989642	.9987671
2	.9974747	.9985500	.9993769	.9999100	.9999851	.9999942	.9999952	.9999970
3	.9861333	.9890343	.9913769	.9932575	.9947583	.9959489	.9968877	.9976235
4	.9507547	.9559168	.9629147	.9713203	.9793223	.9868751	.9936987	.9990787
5	.8723411	.8910899	.9076408	.9221481	.9347752	.9456895	.9550581	.9630444
6	.7410275	.7712392	.7991240	.8246637	.8478791	.8688246	.8875830	.9042598
7	.5685560	.6065958	.6433050	.6784370	.7117878	.7431959	.7725435	.7997540
8	.3865231	.4248466	.4635138	.5021818	.5405164	.5783998	.6149367	.6504600
9	.2295216	.2609969	.2940952	.3286805	.3644075	.4012281	.4385979	.4762836
10	.1179952	.1390751	.1623252	.1877106	.2151178	.2445542	.2757498	.3085582
11	.0520190	.0637053	.0771815	.0925560	.1099160	.1293231	.1508102	.1743779
12	.0195232	.0248784	.0313349	.0390316	.0481103	.0586976	.0709309	.0849243
13	.0061854	.0082103	.0107627	.0139420	.0178470	.0225254	.0280373	.0345279
14	.0016374	.0022657	.0030328	.0040171	.0052574	.0067819	.0086348	.0108291
15	.0003374	.0005158	.0007341	.0010310	.0014297	.0019587	.0026528	.0035333
16	.0000631	.0000951	.0001412	.0002066	.0002884	.0003925	.0005254	.0006938
17	.0000088	.0000138	.0000214	.0000327	.0000492	.0000731	.0001071	.0001532
18	.0000009	.0000015	.0000025	.0000039	.0000062	.0000093	.0000142	.0000220
19	.0000001	.0000001	.0000002	.0000003	.0000006	.0000011	.0000014	.0000022
20					.0000001	.0000001	.0000001	.0000001

$$P(r, n, p) = \sum_{i=0}^n \binom{n}{i} p^i (1-p)^{n-i}$$

AMCP 706-109
n = 21

r	.41	.42	.43	.44	.45	.46	.47	.48
1	.9999844	.9999892	.9999925	.9999948	.9999965	.9999976	.9999984	.9999989
2	.9997897	.9998255	.9998742	.9999090	.9999358	.9999547	.9999682	.9999779
3	.9981966	.9986402	.9990913	.9995420	.9999398	.9999809	.9999905	.9999934
4	.9913174	.9932039	.9947155	.9959195	.9968693	.9976155	.9981970	.9986467
5	.9694052	.9754890	.9803341	.9841676	.9874052	.9900508	.9921970	.9939258
6	.9109782	.9310739	.9430906	.9527759	.9610777	.9681413	.9741067	.9791067
7	.8247903	.8476515	.8683691	.8870028	.9036360	.9183716	.9313271	.94276305
8	.6845347	.7169616	.7475788	.7762624	.8029266	.8275221	.8500343	.8704799
9	.5139697	.5513460	.5881143	.6239943	.6587289	.6920891	.7230770	.7519287
10	.3487682	.3781159	.4143509	.4511621	.4883135	.5254452	.5622794	.5985273
11	.1999985	.2275849	.2570493	.2882449	.3309366	.3550080	.3903150	.4263908
12	.077797	.1105746	.1383832	.1602229	.1841009	.2099075	.2370184	.2674945
13	.0433260	.0628006	.0837832	.0763989	.0907630	.1060769	.1261243	.1452670
14	.0156853	.0198239	.0240220	.0308023	.0378032	.0462271	.0559377	.0671571
15	.0047093	.0061783	.0080267	.0103304	.0131749	.0166558	.0200782	.0259563
16	.0011499	.0015671	.0021140	.0028240	.0037170	.0049003	.0063693	.0082803
17	.0002223	.0003149	.0004413	.0006123	.0008413	.0011450	.0015444	.0020647
18	.0000327	.0000482	.0000702	.0001012	.0001445	.0002042	.0002859	.0003968
19	.0000034	.0000053	.0000080	.0000120	.0000178	.0000261	.0000379	.0000547
20	.0000002	.0000004	.0000006	.0000009	.0000014	.0000021	.0000032	.0000048
21					.0000001	.0000001	.0000001	.0000002

r	.49	.50
1	.9999993	.9999999
2	.9999994	.9999999
3	.9999994	.9999999
4	.9999991	.9999995
5	.9999982	.9999981
6	.9999966	.9999962
7	.9999941	.9999931
8	.9999904	.9999894
9	.9999857	.9999844
10	.9999791	.9999771
11	.9999699	.9999679
12	.9999581	.9999551
13	.9999431	.9999391
14	.9999241	.9999191
15	.9998991	.9998931
16	.9998681	.9998611
17	.9998311	.9998231
18	.9997881	.9997791
19	.9997391	.9997291
20	.9996841	.9996731
21	.9996231	.9996111

AMCP 706-109

$$P(n, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 22

	.01	.02	.03	.04	.05	.06	.07	.08
1	.1983694	.3588293	.4883439	.5926506	.6764665	.7435621	.7974068	.8402900
2	.0802293	.0709567	.1402068	.2192469	.3018487	.3836983	.4610299	.5347577
3	.0013356	.0092698	.0271519	.0558828	.0948230	.1424460	.1967949	.2557935
4	.0000633	.0008770	.0038416	.0103039	.0221825	.0397854	.0637523	.0940751
5	.0000023	.0000634	.0004172	.0015226	.0040223	.0086596	.0161859	.0278784
6	.0000001	.0000036	.0000359	.0001755	.0005815	.0015072	.0032970	.0063681
7		.0000002	.0000025	.0000164	.0000684	.0002137	.0005483	.0012163
8			.0000001	.0000013	.0000066	.0000250	.0000754	.0001923
9				.0000001	.0000005	.0000024	.0000086	.0000254
10						.0000002	.0000008	.0000028
11							.0000001	.0000003
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AMCP 706-109

$$f(n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 22

	.41	.42	.43	.44	.45	.46	.47	.48
1	.99999904	.99999938	.99999957	.99999971	.99999981	.99999987	.99999991	.99999994
2	.99999104	.99999041	.99999025	.99999042	.99999031	.99999044	.99999024	.99999000
3	.99998175	.99998130	.99998153	.99998158	.99998160	.99998171	.99998163	.99998167
4	.99996137	.99996047	.99996048	.99996000	.99996026	.99996033	.99996036	.99996023
5	.999946254	.99994293	.99994611	.99994380	.99994648	.99994506	.99995010	.99996191
6	.99991173	.99991023	.99990623	.99990682	.99990251	.99990217	.99990609	.999906196
7	.99981074	.99981249	.99980493	.99980428	.99980430	.99980457	.99980436	.99980439
8	.99980195	.99980187	.99980186	.99980081	.99980080	.99980119	.99980119	.99980118
9	.99979011	.99979004	.99979040	.99979022	.99979022	.99979040	.99979009	.99979013
10	.99978972	.99978725	.99978992	.99978219	.99978006	.99978014	.99978203	.99978200
11	.99975281	.99970079	.99970600	.99970293	.99970292	.99970457	.99971383	.99970160
12	.99974147	.99974318	.99974007	.99974024	.99974040	.99974037	.99974018	.99974044
13	.99970682	.99970627	.99970612	.99970612	.99970651	.99970618	.99970605	.99970622
14	.99970710	.99970710	.99970753	.99970668	.99970646	.99970712	.99970654	.99970649
15	.99970095	.99970095	.99970248	.99970380	.99970462	.99970258	.99970352	.99970327
16	.99962092	.99961538	.99961655	.99961268	.99961441	.99961578	.99961385	.999617274
17	.99960026	.99960068	.99960160	.99960155	.99960144	.99960124	.99960121	.99960137
18	.99960104	.99960102	.99960248	.99960261	.99960280	.99960276	.99960274	.999601974
19	.999600154	.999600233	.999600347	.999600512	.999600748	.999600809	.999600848	.999600289
20	.99960015	.999600024	.999600038	.999600058	.999600080	.999600131	.999600195	.999600280
21	.999600061	.999600002	.999600003	.999600004	.999600007	.999600010	.999600016	.999600024
22							.999600001	.999600001
	.49	.50						
1	.99999994	.99999998						
2	.99999910	.99999945						
3	.99999112	.99999394						
4	.99994098	.99995723						
5	.99971123	.99978282						
6	.99901654	.99915497						
7	.99875327	.99873606						
8	.99800253	.99810907						
9	.99844420	.99868506						
10	.99865332	.99882665						
11	.99846777	.99840940						
12	.9984231	.99845060						
13	.9984471	.99847135						
14	.9984528	.99841394						
15	.9985378	.9984003						
16	.99810388	.99823394						
17	.99865366	.99845503						
18	.9986106	.99871718						
19	.99803073	.99804377						
20	.99800419	.99800606						
21	.99800037	.99800055						
22	.99800002	.99800002						

$$f(x, y, z) = \sum_{i=1}^n a_i x^i y^i z^i$$

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AMCP 706-109

n = 25

	.33	.34	.35	.36	.37	.38	.39	.40
1	.0000014	.0000021	.0000034	.0000061	.0000098	.0000154	.0000238	.0000362
2	.0000001	.0000002	.0000004	.0000007	.0000011	.0000018	.0000029	.0000044
3				.0000001	.0000001	.0000002	.0000003	.0000004
	.41	.42	.43	.44	.45	.46	.47	.48
1	.00000245	.00000364	.00000576	.00000984	.0000159	.00002393	.00003595	.00005197
2	.0000008	.00000161	.00000255	.00000462	.00000748	.00001136	.00001623	.0000221
3	.00000034	.00000057	.0000009	.0000016	.00000261	.00000411	.0000062	.00000891
4	.00000047	.00000075	.0000012	.0000021	.0000034	.0000054	.0000083	.0000121
5	.00000054	.00000086	.0000014	.0000024	.0000039	.0000062	.0000094	.0000136
6	.00000065	.00000104	.0000017	.0000028	.0000045	.0000072	.0000111	.0000156
7	.00000078	.00000128	.0000021	.0000034	.0000054	.0000086	.0000128	.0000181
8	.00000093	.00000154	.0000025	.0000041	.0000066	.0000104	.0000151	.0000206
9	.0000011	.0000018	.000003	.000005	.000008	.000012	.000017	.000023
10	.0000014	.0000022	.0000036	.0000056	.0000086	.000013	.000019	.000026
11	.0000018	.0000028	.0000045	.0000072	.000011	.000017	.000024	.000032
12	.0000023	.0000036	.0000057	.000009	.000014	.000021	.000029	.000038
13	.0000029	.0000044	.000007	.000011	.000018	.000026	.000035	.000045
14	.0000036	.0000054	.0000086	.000013	.000021	.000031	.000042	.000054
15	.0000044	.0000066	.0000104	.000016	.000025	.000036	.000048	.000061
16	.0000054	.0000081	.0000128	.00002	.000032	.000045	.000059	.000074
17	.0000065	.0000098	.0000154	.000024	.000038	.000054	.000071	.000089
18	.0000078	.0000118	.0000181	.000028	.000043	.000062	.000082	.000103
19	.0000093	.0000141	.000021	.000034	.000052	.000074	.0001	.000122
20	.000011	.0000166	.000025	.00004	.000062	.000086	.000116	.000147
21	.000014	.000021	.000032	.00005	.000078	.000108	.000143	.000178
22	.000018	.000027	.00004	.000066	.000098	.000132	.000171	.00021
23	.000023	.000034	.000051	.000078	.000114	.000151	.000191	.000236
24	.000029	.000042	.000062	.000094	.000132	.000174	.000221	.000268
25	.000036	.000051	.000074	.000111	.000154	.000201	.000251	.000304
	.49	.50						
1	.00000048	.00000071						
2	.00000017	.00000027						
3	.00000051	.00000077						
4	.00000085	.00000122						
5	.00000121	.0000017						
6	.00000164	.0000023						
7	.0000021	.0000029						
8	.0000026	.0000036						
9	.0000032	.0000044						
10	.0000038	.0000051						
11	.0000045	.0000059						
12	.0000053	.0000068						
13	.0000062	.0000078						
14	.0000072	.0000089						
15	.0000083	.0000101						
16	.0000095	.0000114						
17	.0000108	.0000128						
18	.0000122	.0000143						
19	.0000137	.0000159						
20	.0000153	.0000176						
21	.000017	.0000194						
22	.0000188	.0000213						
23	.0000205	.0000231						
24	.0000224	.0000251						
25	.0000244	.0000272						

AMCP 706-109

$$P(r, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 24

	.01	.02	.03	.04	.05	.06	.07	.08
1	.2143219	.3842197	.5185820	.6245868	.7080110	.7734999	.8247771	.8640214
2	.0238544	.0826130	.1612422	.2491735	.3391827	.4265209	.5082455	.5827096
3	.0017294	.0082777	.0341468	.0692880	.1159446	.1718236	.2342585	.3005978
4	.0000905	.0012340	.0053210	.0143230	.0297825	.0526036	.0810255	.1207004
5	.0000036	.0000990	.0006406	.0022994	.0059746	.0126522	.0232641	.0385734
6	.0000001	.0000063	.0000615	.0002954	.0009624	.0024518	.0052714	.0100074
7		.0000003	.0000048	.0000310	.0001270	.0003901	.0009028	.0021415
8			.0000003	.0000027	.0000139	.0000517	.0001527	.0003826
9				.0000002	.0000013	.0000058	.0000200	.0000576
10					.0000001	.0000005	.0000022	.0000074
11							.0000002	.0000004
12								.0000000
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AMCP 706-109

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 24

	.33	.34	.35	.36	.37	.38	.39	.40
18	.0000109	.0000486	.0000754	.0001150	.0001728	.0002560	.0003742	.0005396
19	.0000046	.0000077	.0000123	.0000196	.0000307	.0000474	.0000720	.0001081
20	.0000006	.0000012	.0000018	.0000027	.0000043	.0000070	.0000110	.0000172
21	.0000001	.0000001	.0000002	.0000003	.0000005	.0000008	.0000013	.0000021
22						.0000001	.0000001	.0000002
	.41	.42	.43	.44	.45	.46	.47	.48
1	.9999999	.9999979	.9999958	.9999937	.9999916	.9999895	.9999874	.9999853
2	.9999940	.9999914	.9999888	.9999862	.9999836	.9999810	.9999784	.9999758
3	.9999821	.9999774	.9999727	.9999680	.9999633	.9999586	.9999539	.9999492
4	.9999629	.9999553	.9999477	.9999401	.9999325	.9999249	.9999173	.9999097
5	.9999374	.9999267	.9999160	.9999053	.9998946	.9998839	.9998732	.9998625
6	.9998929	.9998781	.9998633	.9998485	.9998337	.9998189	.9998041	.9997893
7	.9998426	.9998237	.9998048	.9997859	.9997670	.9997481	.9997292	.9997103
8	.9997826	.9997597	.9997368	.9997139	.9996910	.9996681	.9996452	.9996223
9	.9997126	.9996857	.9996588	.9996319	.9996050	.9995781	.9995512	.9995243
10	.9996326	.9995997	.9995668	.9995339	.9995010	.9994681	.9994352	.9994023
11	.9995426	.9995037	.9994648	.9994259	.9993870	.9993481	.9993092	.9992703
12	.9994426	.9993987	.9993548	.9993109	.9992670	.9992231	.9991792	.9991353
13	.9993326	.9992837	.9992348	.9991859	.9991370	.9990881	.9990392	.9989903
14	.9992126	.9991587	.9991048	.9990509	.9990020	.9989531	.9989042	.9988553
15	.9990826	.9990237	.9989648	.9989059	.9988470	.9987881	.9987292	.9986703
16	.9989426	.9988787	.9988148	.9987509	.9986870	.9986231	.9985592	.9984953
17	.9987926	.9987237	.9986548	.9985859	.9985170	.9984481	.9983792	.9983103
18	.9986326	.9985587	.9984848	.9984109	.9983370	.9982631	.9981892	.9981153
19	.9984626	.9983837	.9983048	.9982259	.9981470	.9980681	.9979892	.9979103
20	.9982926	.9982087	.9981248	.9980409	.9979570	.9978731	.9977892	.9977053
21	.9981226	.9980337	.9979448	.9978559	.9977670	.9976781	.9975892	.9975003
22	.9979526	.9978587	.9977648	.9976709	.9975770	.9974831	.9973892	.9972953
23	.9977826	.9976837	.9975848	.9974859	.9973870	.9972881	.9971892	.9970903
24	.9976126	.9975087	.9974048	.9973009	.9971970	.9970931	.9969892	.9968853
	.49	.50						
1	.9999999	.9999999						
2	.9999977	.9999985						
3	.9999933	.9999961						
4	.9999859	.9999896						
5	.9999759	.9999816						
6	.9999639	.9999716						
7	.9999499	.9999596						
8	.9999339	.9999456						
9	.9999159	.9999296						
10	.9998959	.9999116						
11	.9998739	.9998916						
12	.9998499	.9998696						
13	.9998239	.9998456						
14	.9997959	.9998196						
15	.9997659	.9997916						
16	.9997339	.9997616						
17	.9996999	.9997296						
18	.9996639	.9996956						
19	.9996259	.9996596						
20	.9995859	.9996216						
21	.9995439	.9995816						
22	.9994999	.9995396						
23	.9994539	.9994956						
24	.9994059	.9994496						

AMCP 706-109

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 25

p	.01	.02	.03	.04	.05	.06	.07	.08
1	.2221786	.3965353	.5330253	.6396033	.7226104	.7870899	.8370427	.8756357
2	.0257591	.0886451	.1719624	.2641900	.3576241	.4473396	.5304027	.6052786
3	.0019507	.0132434	.0379596	.0764834	.1271065	.1871054	.2534376	.3231668
4	.0001049	.0014459	.0061858	.0165216	.0340906	.0597568	.0936119	.1350922
5	.0000045	.0001217	.0007810	.0027803	.0071649	.0150493	.0274474	.0451435
6	.0000002	.0000062	.0000789	.0003756	.0012130	.0030639	.0065309	.0122927
7		.0000004	.0000065	.0000416	.0001608	.0005138	.0012830	.0027707
8			.0000004	.0000038	.0000196	.0000720	.0002108	.0005233
9				.0000003	.0000008	.0000035	.0000123	.0000336
10					.0000002	.0000009	.0000035	.0000114
11						.0000001	.0000003	.0000013
12								.0000001

p	.09	.10	.11	.12	.13	.14	.15	.16
1	.9053687	.9282102	.9457062	.9590676	.9692404	.9769611	.9828022	.9872067
2	.0713902	.1287941	.1777944	.2195255	.2543336	.2831983	.3069295	.3263853
3	.0137015	.0329059	.0529129	.0729194	.0929240	.1129263	.1329269	.1529261
4	.0014682	.0033607	.0053607	.0073607	.0093607	.0113607	.0133607	.0153607
5	.0000615	.0000936	.0001309	.0001732	.0002205	.0002728	.0003301	.0003924
6	.0021033	.0033999	.0048949	.0065809	.0084529	.0105129	.0127615	.0152060
7	.0053542	.0084764	.0115193	.0144711	.0172290	.0197919	.0221488	.0243067
8	.0011439	.0022613	.0034120	.0045959	.0058120	.0070593	.0083378	.0096475
9	.0002069	.0004575	.0007251	.0010176	.0013320	.0016683	.0020265	.0024067
10	.0000319	.0000790	.0001266	.0001747	.0002232	.0002721	.0003214	.0003711
11	.0000042	.0000117	.0000290	.0000655	.0001369	.0002678	.0004497	.0006889
12	.0000005	.0000015	.0000041	.0000102	.0000232	.0000493	.0000985	.0001611
13		.0000002	.0000005	.0000014	.0000034	.0000079	.0000169	.0000344
14			.0000001	.0000002	.0000004	.0000011	.0000025	.0000055
15					.0000001	.0000003	.0000007	.0000017
16							.0000001	.0000001

p	.17	.18	.19	.20	.21	.22	.23	.24
1	.9905169	.9929960	.9948462	.9962221	.9972415	.9979938	.9985470	.9989521
2	.0094831	.0070040	.0051538	.0037779	.0027585	.0020062	.0014530	.0010479
3	.0005169	.0010040	.0014862	.0019621	.0024315	.0028938	.0033470	.0037921
4	.0000615	.0001217	.0001810	.0002403	.0002996	.0003589	.0004182	.0004775
5	.0000045	.0000093	.0000141	.0000189	.0000237	.0000285	.0000333	.0000381
6	.0000002	.0000004	.0000006	.0000008	.0000010	.0000012	.0000014	.0000016
7	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
8	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
9	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
10	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
11	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
12	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
13	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
14	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
15	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
16	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
17	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
18	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
19	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000

p	.25	.26	.27	.28	.29	.30	.31	.32
1	.9992475	.9994620	.9996171	.9997288	.9998088	.9998659	.9999064	.9999350
2	.0007525	.0005380	.0003829	.0002712	.0001912	.0001341	.0000936	.0000650
3	.0000615	.0001217	.0001810	.0002403	.0002996	.0003589	.0004182	.0004775
4	.0000045	.0000093	.0000141	.0000189	.0000237	.0000285	.0000333	.0000381
5	.0000002	.0000004	.0000006	.0000008	.0000010	.0000012	.0000014	.0000016
6	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
7	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
8	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
9	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
10	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
11	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
12	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
13	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
14	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
15	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
16	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
17	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
18	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
19	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
20	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
21	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000

p	.33	.34	.35	.36	.37	.38	.39	.40
1	.9999551	.9999692	.9999790	.9999857	.9999904	.9999935	.9999957	.9999973
2	.0000449	.0000308	.0000210	.0000143	.0000096	.0000065	.0000043	.0000027
3	.0000045	.0000093	.0000141	.0000189	.0000237	.0000285	.0000333	.0000381
4	.0000002	.0000004	.0000006	.0000008	.0000010	.0000012	.0000014	.0000016
5	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
6	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
7	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
8	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
9	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
10	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
11	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
12	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
13	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
14	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
15	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
16	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
17	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
18	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
19	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
20	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
21	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000

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n = 25

$$F(x, n, p) = \sum_{i=0}^n \binom{n}{i} p^i (1-p)^{n-i}$$

	.33	.34	.35	.36	.37	.38	.39	.40
14	.0149213	.0196254	.0254606	.0326022	.0412301	.0515246	.0636604	.0778011
15	.0050135	.0068971	.0093140	.0124047	.0163042	.0211605	.0271334	.0343918
16	.0014621	.0020886	.0029302	.0040733	.0055688	.0075130	.0100076	.0131691
17	.0003657	.0005405	.0007725	.0011443	.0016283	.0022851	.0031643	.0043264
18	.0000770	.0001102	.0001608	.0002270	.0003131	.0004307	.0005841	.0007854
19	.0000133	.0000216	.0000344	.0000540	.0000833	.0001267	.0001899	.0002807
20	.0000019	.0000032	.0000054	.0000088	.0000141	.0000223	.0000348	.0000536
21	.0000002	.0000004	.0000007	.0000011	.0000019	.0000031	.0000051	.0000082
22			.0000001	.0000001	.0000002	.0000003	.0000006	.0000010
23								.0000001
x	.41	.42	.43	.44	.45	.46	.47	.48
1	.9999981	.9999988	.9999992	.9999995	.9999997	.9999998	.9999999	.9999999
2	.9999657	.9999767	.9999843	.9999895	.9999931	.9999954	.9999970	.9999981
3	.9999651	.9999751	.9999827	.9999879	.9999922	.9999950	.9999969	.9999978
4	.9999536	.9999636	.9999710	.9999762	.9999795	.9999818	.9999837	.9999851
5	.9997440	.9994841	.9990800	.9985879	.99796910	.9972813	.9965261	.9957104
6	.9766635	.9815972	.9856028	.9888274	.9914009	.9934372	.9950342	.9962755
7	.9394149	.9504911	.9570603	.9677164	.9742462	.9796255	.9840176	.9875713
8	.8691567	.8893514	.9071493	.9226942	.9361492	.9476905	.9575006	.9657629
9	.7593037	.7897359	.8176795	.8431012	.8660162	.8864818	.9045916	.9204687
10	.6151088	.6514803	.6801893	.7249752	.7576288	.7879937	.8159663	.8414940
11	.4547036	.4956116	.5363063	.5764739	.6157399	.6537581	.6902187	.7240545
12	.3094136	.3507226	.3920057	.4336554	.4747341	.4978270	.5381569	.5780356
13	.1796850	.2080231	.2386827	.2715160	.3063240	.3428601	.3808350	.4199229
14	.0940920	.1126546	.1335793	.1569199	.1826884	.2108506	.2413232	.2739928
15	.0431088	.0534604	.0665177	.0797430	.0959830	.1144627	.1352792	.1584957
16	.0171275	.0220262	.0280203	.0352744	.0439597	.0542500	.0663173	.0803266
17	.0058432	.0077995	.0102934	.0134372	.0173569	.0221923	.0280954	.0352291
18	.0016018	.0023454	.0032136	.0043536	.0058338	.0077349	.0101511	.0131904
19	.0004096	.0005921	.0008399	.0011816	.0016435	.0022613	.0030787	.0041470
20	.0000913	.0001218	.0001802	.0002633	.0003804	.0005435	.0007680	.0010741
21	.0000017	.0000020	.0000030	.0000046	.00000704	.00001045	.00001533	.00002276
22	.0000016	.0000025	.0000041	.0000069	.0000100	.0000154	.0000235	.0000355
23	.0000001	.0000002	.0000004	.0000006	.0000010	.0000016	.0000026	.0000041
24					.0000001	.0000001	.0000002	.0000003
x	.49	.50						
1	1.0000000	1.0000000						
2	.9999999	.9999999						
3	.9999995	.9999993						
4	.9999985	.9999977						
5	.9999955	.9999947						
6	.9972317	.9979613						
7	.9904204	.9926814						
8	.9726577	.9783574						
9	.9342588	.9461239						
10	.8645720	.8852385						
11	.7574456	.7878219						
12	.6170928	.6549810						
13	.4597693	.5000000						
14	.3086154	.3450100						
15	.1841356	.2121781						
16	.0964303	.1147615						
17	.0437641	.0538761						
18	.0164754	.0216426						
19	.0055362	.0073166						
20	.0014071	.0020387						
21	.0003200	.0004553						
22	.0000530	.0000783						
23	.0000063	.0000097						
24	.0000005	.0000008						

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$$F(c, n, r) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 26

λp	.01	.02	.03	.04	.05	.06	.07	.08
1	.2299549	.4086046	.5470345	.6540192	.7364799	.7998645	.8484497	.8855849
2	.0277233	.0948029	.1827943	.2792066	.3759735	.4677247	.5518675	.6269071
3	.0031888	.0147515	.0419797	.0839917	.1386324	.2027195	.2728251	.3457357
4	.0001254	.0016818	.0071390	.0189200	.0387414	.0673977	.1047996	.1501382
5	.0000055	.0001482	.0009431	.0033300	.0085112	.0177317	.0320789	.0523394
6	.0000002	.0000104	.0001000	.0004718	.0015106	.0037030	.0079950	.0149308
7		.0000006	.0000087	.0000550	.0002210	.0006668	.0016503	.0035325
8			.0000006	.0000054	.0000270	.0000985	.0002859	.0007031
9				.0000004	.0000028	.0000121	.0000420	.0001108
10					.0000002	.0000013	.0000053	.0000172
11						.0000001	.0000006	.0000021
12							.0000001	.0000002
13								
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n = 26

$$F(c, n, p) = \sum_{j=0}^n \binom{n}{j} p^j (1-p)^{n-j}$$

x	.33	.34	.35	.36	.37	.38	.39	.40
14	.0226503	.0294262	.0377051	.0476829	.0595507	.0734880	.0896555	.1081877
15	.0082965	.0112247	.0149653	.0196758	.0255268	.0326989	.0413790	.0517553
16	.0026407	.0037235	.0051697	.0070726	.0095409	.0126990	.0166867	.0216501
17	.0007255	.0010668	.0015435	.0021987	.0030862	.0042717	.0058332	.0078633
18	.0001707	.0002618	.0003949	.0005860	.0008564	.0012334	.0017524	.0024538
19	.0000340	.0000544	.0000856	.0001325	.0002016	.0003023	.0004464	.0006506
20	.0000057	.0000095	.0000155	.0000250	.0000397	.0000620	.0000953	.0001444
21	.0000008	.0000015	.0000023	.0000039	.0000064	.0000104	.0000167	.0000263
22	.0000001	.0000002	.0000003	.0000005	.0000008	.0000014	.0000023	.0000038
23					.0000001	.0000001	.0000001	.0000004
x	.41	.42	.43	.44	.45	.46	.47	.48
1	.9999989	.9999993	.9999996	.9999997	.9999998	.9999999	.9999999	1.0000000
2	.9999790	.9999860	.9999907	.9999919	.9999960	.9999974	.9999984	.9999990
3	.9998060	.9998656	.9999076	.9999370	.9999574	.9999715	.9999810	.9999875
4	.9988444	.9991681	.9994058	.9995792	.9997045	.9997943	.9998581	.9999030
5	.9950079	.9962637	.9972893	.9979626	.9983147	.9989267	.9992314	.9994546
6	.9832565	.9870097	.9900048	.9923740	.9942315	.9956747	.9967858	.9976334
7	.9546868	.9635557	.9709296	.9770053	.9819658	.9859789	.9891954	.9917493
8	.8979625	.9150301	.9298150	.9425040	.9532929	.9623806	.9699636	.9762310
9	.8043434	.8315744	.8561515	.8781221	.8975761	.9146378	.9294588	.9422099
10	.6742287	.7107076	.7450101	.7769507	.8064032	.8332982	.8576202	.8794018
11	.5205189	.5619165	.6024760	.6418145	.6795809	.7155065	.7493201	.7808415
12	.3651473	.4051960	.4460750	.4873732	.5286717	.5695588	.6096259	.6485087
13	.2301863	.2691369	.3085916	.3484897	.3743235	.4141453	.4547763	.4959170
14	.1301855	.1527094	.1787738	.2073422	.2383244	.2715950	.3066938	.3440388
15	.0640119	.0781219	.0948412	.1137009	.1350004	.1588011	.1851199	.2139247
16	.0277799	.0352285	.0441872	.0544806	.0673702	.0819474	.0987294	.1170478
17	.0104697	.0137747	.0179160	.0230456	.0293282	.0369381	.0460597	.0568759
18	.0033039	.0046161	.0062579	.0083504	.0110102	.0143853	.0185849	.0237690
19	.0009353	.0013274	.0018605	.0025773	.0035291	.0047792	.0064027	.0084899
20	.0002159	.0003185	.0004639	.0006674	.0009488	.0013337	.0018340	.0025500
21	.0000409	.0000628	.0000951	.0001421	.0002099	.0003064	.0004422	.0006313
22	.0000062	.0000099	.0000156	.0000242	.0000372	.0000564	.0000845	.0001253
23	.0000007	.0000012	.0000020	.0000032	.0000051	.0000080	.0000124	.0000192
24	.0000001	.0000001	.0000002	.0000003	.0000005	.0000008	.0000013	.0000021
25						.0000001	.0000001	.0000002
x	.49	.50						
1	1.0000000	1.0000000						
2	.9999994	.9999996						
3	.9999914	.9999948						
4	.9999544	.9999560						
5	.9996167	.9997332						
6	.9982738	.9987530						
7	.9937579	.9951221						
8	.9813614	.9852044						
9	.9530742	.9622407						
10	.8987185	.9156012						
11	.8099378	.8365302						
12	.6885857	.7214015						
13	.5368578	.5774905						
14	.3826808	.4225095						
15	.2451307	.2785985						
16	.1394059	.1634698						
17	.0695705	.0843188						
18	.0301019	.0375593						
19	.0111414	.0144796						
20	.0034712	.0046777						
21	.0008414	.0012470						
22	.0001818	.0002668						
23	.0000292	.0000440						
24	.0000033	.0000052						
25	.0000002	.0000004						

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$$P(x, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 27

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.2376573	.4804325	.5606235	.6678584	.7406559	.8118726	.8590583	.8847381
2	.0897456	.1616789	.1937215	.2941991	.3939038	.4876530	.5726283	.6476014
3	.0024441	.0163525	.0462042	.0918003	.1504944	.2186198	.2943581	.3882294
4	.0001460	.0019432	.0081042	.0215229	.0437359	.0755170	.1165614	.1657860
5	.0000067	.0001788	.0011290	.0039536	.0100227	.0207117	.0371493	.0601633
6	.0000002	.0000132	.0001253	.0005861	.0018606	.0046199	.0096809	.0179143
7		.0000008	.0000114	.0000716	.0002654	.0008537	.0020945	.0044436
8			.0000009	.0000073	.0000367	.0001326	.0003814	.0009295
9			.0000001	.0000006	.0000040	.0000175	.0000591	.0001645
10					.0000004	.0000020	.0000078	.0000253
11						.0000002	.0000009	.0000033
12							.0000001	.0000004
13								
14								
15								
16								
17								
18								
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$$P(x, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

AMCP 706-109
n = 27

N	.33	.34	.35	.36	.37	.38	.39	.40
13	.0715601	.0907955	.1104349	.1331693	.1584372	.1864193	.2170342	.2501370
14	.0310071	.0421612	.0534230	.0669863	.0826346	.1007226	.1213695	.1446518
15	.0110111	.0174132	.0229242	.0297584	.0381156	.0481987	.0602068	.0743283
16	.0045071	.0062739	.0085982	.0116098	.0154557	.0202990	.0263167	.0336970
17	.0013575	.0019701	.0028126	.0039533	.0054745	.0074741	.0100661	.0133813
18	.0003518	.0005355	.0007969	.0011666	.0016815	.0023879	.0033433	.0046177
19	.0000791	.0001249	.0001939	.0002957	.0004439	.0006861	.0009554	.0013719
20	.0000150	.0000247	.0000401	.0000637	.0000996	.0001633	.0002323	.0003469
21	.3000024	.0000041	.0000069	.0000118	.0000187	.0000306	.0000474	.0000736
22	.0000003	.0000006	.0000010	.0000017	.0000029	.0000048	.0000079	.0000124
23		.0000001	.0000001	.0000002	.0000004	.0000006	.0000011	.0000018
24						.0000001	.0000001	.0000002
N	.41	.42	.43	.44	.45	.46	.47	.48
1	.9999993	.9999996	.9999997	.9999998	.9999999	.9999999	1.0000000	1.0000000
2	.9999997	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
3	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
4	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
5	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
6	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
7	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
8	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
9	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
10	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
11	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
12	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
13	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
14	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
15	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
16	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
17	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
18	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
19	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
20	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
21	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
22	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
23	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
24	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
25	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
26	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
N	.49	.50						
1	1.0000000	1.0000000						
2	.9999999	.9999999						
3	.9999999	.9999999						
4	.9999999	.9999999						
5	.9999999	.9999999						
6	.9999999	.9999999						
7	.9999999	.9999999						
8	.9999999	.9999999						
9	.9999999	.9999999						
10	.9999999	.9999999						
11	.9999999	.9999999						
12	.9999999	.9999999						
13	.9999999	.9999999						
14	.9999999	.9999999						
15	.9999999	.9999999						
16	.9999999	.9999999						
17	.9999999	.9999999						
18	.9999999	.9999999						
19	.9999999	.9999999						
20	.9999999	.9999999						
21	.9999999	.9999999						
22	.9999999	.9999999						
23	.9999999	.9999999						
24	.9999999	.9999999						
25	.9999999	.9999999						
26	.9999999	.9999999						

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 20

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.2453807	.4330238	.5738048	.6811441	.7621731	.8231602	.8692242	.9031590
2	.0318248	.1074660	.2047285	.3091454	.4116914	.5071062	.5892784	.6673723
3	.0027171	.0180470	.0506297	.0998963	.1626449	.2347618	.3119770	.3905792
4	.0001690	.002314	.0093248	.0243140	.0490739	.0841032	.1288672	.1819815
5	.0000081	.0002141	.0013407	.0046563	.0117004	.0240000	.0427260	.0686131
6	.0000003	.0000016	.0001554	.0007208	.0022687	.0055854	.0116051	.0212943
7		.0000010	.0000148	.0000922	.0003642	.0010797	.0026253	.0055213
8		.0000001	.0000012	.0000099	.0000492	.0001758	.0005013	.0012106
9			.0000001	.0000009	.0000056	.0000244	.0000816	.0002266
10				.0000001	.0000006	.0000029	.0000114	.0000365
11						.0000003	.0000014	.0000051
12							.0000001	.0000006
13								.0000001
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$$P(r, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

AMCP 706-109
n = 20

p	.33	.34	.35	.36	.37	.38	.39	.40
11	.3006799	.3415615	.3839644	.4274050	.4713774	.5153695	.5588802	.6014337
12	.1007737	.2126084	.3471309	.5040860	.6831512	.8739455	.1060411	.4489766
13	.0971078	.1184986	.1487516	.1698787	.1998255	.2324671	.2676089	.3049893
14	.0463896	.0588302	.0735771	.0908122	.1106816	.1332873	.1586787	.1868458
15	.0196246	.0254962	.0336688	.0431604	.0545876	.0681578	.0840603	.1024577
16	.0073707	.0100613	.0136123	.0181433	.0238398	.0309009	.0395338	.0499495
17	.0023969	.0034334	.0048376	.0067096	.0091675	.0123475	.0164038	.0215074
18	.0006850	.0010233	.0015024	.0021698	.0030849	.0043207	.0059452	.0081231
19	.0001697	.0002645	.0004049	.0006092	.0009018	.0013142	.0018867	.0026702
20	.0000362	.0000568	.0000939	.0001472	.0002270	.0003443	.0005143	.0007569
21	.0000065	.0000111	.0000185	.0000303	.0000487	.0000769	.0001195	.0001829
22	.0000010	.0000018	.0000031	.0000052	.0000088	.0000144	.0000233	.0000371
23	.0000001	.0000002	.0000004	.0000007	.0000013	.0000022	.0000037	.0000062
24				.0000001	.0000002	.0000003	.0000005	.0000008
25								.0000001

p	.41	.42	.43	.44	.45	.46	.47	.48
1	.9999996	.9999998	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000
2	.9999992	.9999994	.9999996	.9999998	.9999998	.9999999	.9999999	.9999997
3	.9999987	.9999989	.9999991	.9999993	.9999995	.9999996	.9999997	.9999996
4	.9999980	.9999982	.9999984	.9999986	.9999987	.9999988	.9999989	.9999989
5	.9999972	.9999974	.9999976	.9999978	.9999979	.9999980	.9999981	.9999981
6	.9999963	.9999965	.9999967	.9999968	.9999969	.9999970	.9999971	.9999971
7	.9999954	.9999956	.9999957	.9999958	.9999959	.9999960	.9999961	.9999961
8	.9999944	.9999946	.9999947	.9999948	.9999949	.9999950	.9999951	.9999951
9	.9999934	.9999936	.9999937	.9999938	.9999939	.9999940	.9999941	.9999941
10	.9999924	.9999926	.9999927	.9999928	.9999929	.9999930	.9999931	.9999931
11	.9999914	.9999916	.9999917	.9999918	.9999919	.9999920	.9999921	.9999921
12	.9999904	.9999906	.9999907	.9999908	.9999909	.9999910	.9999911	.9999911
13	.9999894	.9999896	.9999897	.9999898	.9999899	.9999900	.9999901	.9999901
14	.9999884	.9999886	.9999887	.9999888	.9999889	.9999890	.9999891	.9999891
15	.9999874	.9999876	.9999877	.9999878	.9999879	.9999880	.9999881	.9999881
16	.9999864	.9999866	.9999867	.9999868	.9999869	.9999870	.9999871	.9999871
17	.9999854	.9999856	.9999857	.9999858	.9999859	.9999860	.9999861	.9999861
18	.9999844	.9999846	.9999847	.9999848	.9999849	.9999850	.9999851	.9999851
19	.9999834	.9999836	.9999837	.9999838	.9999839	.9999840	.9999841	.9999841
20	.9999824	.9999826	.9999827	.9999828	.9999829	.9999830	.9999831	.9999831
21	.9999814	.9999816	.9999817	.9999818	.9999819	.9999820	.9999821	.9999821
22	.9999804	.9999806	.9999807	.9999808	.9999809	.9999810	.9999811	.9999811
23	.9999794	.9999796	.9999797	.9999798	.9999799	.9999800	.9999801	.9999801
24	.9999784	.9999786	.9999787	.9999788	.9999789	.9999790	.9999791	.9999791
25	.9999774	.9999776	.9999777	.9999778	.9999779	.9999780	.9999781	.9999781
26	.9999764	.9999766	.9999767	.9999768	.9999769	.9999770	.9999771	.9999771
27	.9999754	.9999756	.9999757	.9999758	.9999759	.9999760	.9999761	.9999761
28	.9999744	.9999746	.9999747	.9999748	.9999749	.9999750	.9999751	.9999751
29	.9999734	.9999736	.9999737	.9999738	.9999739	.9999740	.9999741	.9999741
30	.9999724	.9999726	.9999727	.9999728	.9999729	.9999730	.9999731	.9999731
31	.9999714	.9999716	.9999717	.9999718	.9999719	.9999720	.9999721	.9999721
32	.9999704	.9999706	.9999707	.9999708	.9999709	.9999710	.9999711	.9999711
33	.9999694	.9999696	.9999697	.9999698	.9999699	.9999700	.9999701	.9999701
34	.9999684	.9999686	.9999687	.9999688	.9999689	.9999690	.9999691	.9999691
35	.9999674	.9999676	.9999677	.9999678	.9999679	.9999680	.9999681	.9999681
36	.9999664	.9999666	.9999667	.9999668	.9999669	.9999670	.9999671	.9999671
37	.9999654	.9999656	.9999657	.9999658	.9999659	.9999660	.9999661	.9999661
38	.9999644	.9999646	.9999647	.9999648	.9999649	.9999650	.9999651	.9999651
39	.9999634	.9999636	.9999637	.9999638	.9999639	.9999640	.9999641	.9999641
40	.9999624	.9999626	.9999627	.9999628	.9999629	.9999630	.9999631	.9999631
41	.9999614	.9999616	.9999617	.9999618	.9999619	.9999620	.9999621	.9999621
42	.9999604	.9999606	.9999607	.9999608	.9999609	.9999610	.9999611	.9999611
43	.9999594	.9999596	.9999597	.9999598	.9999599	.9999600	.9999601	.9999601
44	.9999584	.9999586	.9999587	.9999588	.9999589	.9999590	.9999591	.9999591
45	.9999574	.9999576	.9999577	.9999578	.9999579	.9999580	.9999581	.9999581
46	.9999564	.9999566	.9999567	.9999568	.9999569	.9999570	.9999571	.9999571
47	.9999554	.9999556	.9999557	.9999558	.9999559	.9999560	.9999561	.9999561
48	.9999544	.9999546	.9999547	.9999548	.9999549	.9999550	.9999551	.9999551
49	.9999534	.9999536	.9999537	.9999538	.9999539	.9999540	.9999541	.9999541
50	.9999524	.9999526	.9999527	.9999528	.9999529	.9999530	.9999531	.9999531
51	.9999514	.9999516	.9999517	.9999518	.9999519	.9999520	.9999521	.9999521
52	.9999504	.9999506	.9999507	.9999508	.9999509	.9999510	.9999511	.9999511
53	.9999494	.9999496	.9999497	.9999498	.9999499	.9999500	.9999501	.9999501
54	.9999484	.9999486	.9999487	.9999488	.9999489	.9999490	.9999491	.9999491
55	.9999474	.9999476	.9999477	.9999478	.9999479	.9999480	.9999481	.9999481
56	.9999464	.9999466	.9999467	.9999468	.9999469	.9999470	.9999471	.9999471
57	.9999454	.9999456	.9999457	.9999458	.9999459	.9999460	.9999461	.9999461
58	.9999444	.9999446	.9999447	.9999448	.9999449	.9999450	.9999451	.9999451
59	.9999434	.9999436	.9999437	.9999438	.9999439	.9999440	.9999441	.9999441
60	.9999424	.9999426	.9999427	.9999428	.9999429	.9999430	.9999431	.9999431
61	.9999414	.9999416	.9999417	.9999418	.9999419	.9999420	.9999421	.9999421
62	.9999404	.9999406	.9999407	.9999408	.9999409	.9999410	.9999411	.9999411
63	.9999394	.9999396	.9999397	.9999398	.9999399	.9999400	.9999401	.9999401
64	.9999384	.9999386	.9999387	.9999388	.9999389	.9999390	.9999391	.9999391
65	.9999374	.9999376	.9999377	.9999378	.9999379	.9999380	.9999381	.9999381
66	.9999364	.9999366	.9999367	.9999368	.9999369	.9999370	.9999371	.9999371
67	.9999354	.9999356	.9999357	.9999358	.9999359	.9999360	.9999361	.9999361
68	.9999344	.9999346	.9999347	.9999348	.9999349	.9999350	.9999351	.9999351
69	.9999334	.9999336	.9999337	.9999338	.9999339	.9999340	.9999341	.9999341
70	.9999324	.9999326	.9999327	.9999328	.9999329	.9999330	.9999331	.9999331
71	.9999314	.9999316	.9999317	.9999318	.9999319	.9999320	.9999321	.9999321
72	.9999304	.9999306	.9999307	.9999308	.9999309	.9999310	.9999311	.9999311
73	.9999294	.9999296	.9999297	.9999298	.9999299	.9999300	.9999301	.9999301
74	.9999284	.9999286	.9999287	.9999288	.9999289	.9999290	.9999291	.9999291
75	.9999274	.9999276	.9999277	.9999278	.9999279	.9999280	.9999281	.9999281
76	.9999264	.9999266	.9999267	.9999268	.9999269	.9999270	.9999271	.9999271
77	.9999254	.9999256	.9999257	.9999258	.9999259	.9999260	.9999261	.9999261
78	.9999244	.9999246	.9999247	.9999248	.9999249	.9999250	.9999251	.9999251
79	.9999234	.9999236	.9999237	.9999238	.9999239	.9999240	.9999241	.9999241
80	.9999224	.9999226	.9999227	.9999228	.9999229	.9999230	.9999231	.9999231
81	.9999214	.9999216	.9999217	.9999218	.9999219	.9999220	.9999221	.9999221
82	.9999204	.9999206	.9999207	.9999208	.9999209	.9999210	.9999211	.9999211
83	.9999194	.9999196	.9999197	.9999198	.9999199	.9999200	.9999201	.9999201
84	.9999184	.9999186	.9999187	.9999188	.9999189	.9999190	.9999191	.9999191
85	.9999174	.9999176	.9999177	.9999178	.9999179	.9999180	.9999181	.9999181
86	.9999164	.9999166	.9999167	.9999168	.9999169	.9999170	.9999171	.9999171
87	.9999154	.9999156	.9999157	.9999158	.9999159	.9999160	.9999161	.9999161
88	.9999144	.9999146	.9999147	.9999148	.9999149	.9999150	.9999151	.9999151
89	.9999134	.9999136	.9999137	.9999138	.9999139	.9999140	.9999141	.9999141
90	.9999124	.9999126	.9999127	.9999128	.9999129	.9999130	.9999131	.9999131
91	.9999114	.9999116	.9999117	.9999118	.9999119	.9999120	.9999121	.9999121
92	.9999104	.9999106	.9999107	.9999108	.9999109	.9999110	.9999111	.9999111
93	.9999094	.9999096	.9999097	.9999098	.9999099	.9999100	.9999101	.9999101
94	.9999084	.9999086	.9999087	.9999088	.9999089	.9999090	.9999091	.9999091
95	.9999074	.9999076	.9999077	.9999078	.9999079	.9999080	.9999081	.9999081
96	.9999064	.9999066	.9999067	.9999068	.9999069	.9999070	.9999071	.9999071
97	.9999054	.9999056	.9999057	.9999058	.9999059	.9999060	.9999061	.9999061
98	.9999044	.9999046	.9999047	.9999048	.9999049	.9999050	.9999051	.9999051
99	.9999034	.9999036	.9999037	.9999038	.9999039	.9999040	.9999041	.9999041
100	.9999024	.9999026	.9999027	.9999028	.9999029	.9999030	.9999031	.9999031

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$$I(e, n, p) = \sum_{r=0}^n \binom{n}{r} e^r (1-e)^{n-r} p^r$$

n = 20

λ	.01	.02	.03	.04	.05	.06	.07	.08
1	.2528279	.4433833	.5865907	.6938983	.7740645	.8337706	.8780995	.9109063
2	.0339593	.1139572	.2188008	.3440354	.4822155	.6260693	.7612016	.8862332
3	.0010082	.0198154	.0552526	.1002662	.1751168	.2811028	.4127226	.5716861
4	.0001945	.0025477	.0105640	.0273565	.0547534	.0931427	.1416840	.2086693
5	.0000097	.0002545	.0015802	.0054435	.0135767	.0276063	.0467566	.0776826
6	.0000004	.0000205	.0001909	.0008782	.0027407	.0066903	.0137836	.0250797
7		.0000014	.0000191	.0001174	.0004594	.0013501	.0032541	.0067830
8		.0000001	.0000016	.0000132	.0000649	.0002301	.0006500	.0015554
9			.0000001	.0000013	.0000070	.0000335	.0001110	.0003053
10				.0000001	.0000008	.0000042	.0000163	.0000517
11					.0000001	.0000005	.0000021	.0000076
12							.0000002	.0000010
13								.0000001

λ	.09	.10	.11	.12	.13	.14	.15	.16
1	.9351066	.9528907	.9659349	.9754511	.9823779	.9873975	.9910224	.9936304
2	.7489839	.8011279	.8438362	.8703010	.8900153	.9027028	.9150797	.9264477
3	.4912754	.5650400	.6325644	.6930617	.7468604	.7923083	.8315735	.8646847
4	.2810866	.3899520	.5075542	.6346244	.7611363	.876474	.9612989	.9737863
5	.1144223	.1504441	.2087530	.2840322	.3727775	.4651365	.5512134	.6046529
6	.0415005	.0637717	.0920794	.1265830	.1668030	.2123345	.2620556	.3150021
7	.0126522	.0216167	.0343977	.0516107	.0737047	.1009193	.1332619	.1705063
8	.0032777	.0062466	.0109733	.0180192	.0279571	.0413251	.0585832	.0800735
9	.0007200	.0015502	.0030115	.0054224	.0091505	.0146463	.0234230	.0377019
10	.0001396	.0003326	.0007154	.0014143	.0026042	.0045125	.0074192	.0116508
11	.0000233	.0000620	.0001478	.0003212	.0006454	.0012132	.0021521	.0036306
12	.0000034	.0000101	.0000247	.0000617	.0001399	.0002854	.0005469	.0009919
13	.0000004	.0000014	.0000042	.0000111	.0000266	.0000589	.0001220	.0002380
14		.0000002	.0000006	.0000017	.0000044	.0000107	.0000239	.0000502
15			.0000001	.0000002	.0000006	.0000017	.0000041	.0000093
16					.0000001	.0000002	.0000006	.0000015
17							.0000001	.0000002

λ	.17	.18	.19	.20	.21	.22	.23	.24
1	.9954995	.9968333	.9977815	.9984526	.9989256	.9992574	.9994898	.9996504
2	.9687673	.9766748	.9826900	.9872317	.9906428	.9931835	.9950647	.9964486
3	.9221138	.9447243	.9631303	.9776768	.9891833	.9969193	.9985622	.9992394
4	.7504126	.7923342	.8285042	.8556125	.8740736	.8840162	.8862316	.8892069
5	.5626948	.6177045	.6689818	.7160535	.7586539	.7966974	.8292473	.8594045
6	.3700440	.4260377	.4818076	.5365961	.5892987	.6392861	.6860130	.7290975
7	.2122007	.2577449	.3063424	.3571386	.4092248	.4616930	.5136013	.5643981
8	.1059907	.1363630	.1710456	.2097271	.2519451	.2971122	.3445466	.3935070
9	.0461626	.0630897	.0837709	.1081917	.1369716	.1694558	.2056146	.2451016
10	.0175700	.0255895	.0360032	.0492635	.0656590	.0854426	.1085432	.1357502
11	.0058573	.0090829	.0135917	.0197044	.0277459	.0380506	.0500358	.0646862
12	.0017137	.0028356	.0045142	.0069403	.0103382	.0149623	.0210902	.0290149
13	.0004406	.0007786	.0013196	.0021537	.0033271	.0051940	.0077170	.0111706
14	.0000994	.0001881	.0003396	.0005809	.0009843	.0015911	.0024944	.0038017
15	.0000198	.0000400	.0000769	.0001418	.0002513	.0004297	.0007112	.0011423
16	.0000035	.0000075	.0000153	.0000300	.0000565	.0001023	.0001786	.0003024
17	.0000005	.0000012	.0000027	.0000056	.0000111	.0000213	.0000394	.0000704
18	.0000001	.0000002	.0000004	.0000009	.0000019	.0000039	.0000076	.0000143
19			.0000001	.0000003	.0000007	.0000013	.0000023	.0000045
20				.0000001	.0000002	.0000004	.0000008	.0000016
21					.0000001	.0000002	.0000004	.0000008

λ	.25	.26	.27	.28	.29	.30	.31	.32
1	.9997619	.9998397	.9998913	.9999271	.9999514	.9999670	.9999788	.9999861
2	.9974602	.9981948	.9987250	.9991051	.9993759	.9995676	.9996702	.9997965
3	.9867188	.9901089	.9926859	.9946299	.9960852	.9971665	.9979639	.9985475
4	.9544446	.9645399	.9725832	.9789664	.9839881	.9879050	.9909343	.9932576
5	.8846757	.9061459	.9242541	.9393727	.9518713	.9621051	.9704059	.9770766
6	.7683107	.8035619	.8348785	.8623849	.8863806	.9068196	.9242912	.9390037
7	.6131574	.6593897	.7026514	.7426260	.7791183	.8120445	.8414186	.8673371
8	.4432276	.4929515	.5419606	.5896009	.6353009	.6785856	.7190828	.7565249
9	.2874586	.3321362	.3785183	.4259490	.4737596	.5212944	.5679361	.6131209
10	.1663049	.2003967	.2374653	.2774500	.3198024	.3648041	.4094875	.4556526
11	.0856358	.1076527	.1331248	.1619508	.1940345	.2291834	.2671135	.3074569
12	.0390324	.0514289	.0664664	.0843681	.1053045	.1293811	.1566282	.1869943
13	.0157807	.0217975	.0294846	.0391114	.0509418	.0652325	.0821708	.1019619
14	.0056454	.0081830	.0115978	.0160963	.0219051	.0292654	.0384260	.0496342
15	.0017843	.0027162	.0040370	.0058674	.0083508	.0116538	.0159649	.0214916
16	.0004972	.0007954	.0012406	.0018855	.0028145	.0041060	.0058736	.0082480
17	.0001218	.0002049	.0003356	.0005359	.0008139	.0012756	.0019066	.0027940
18	.0000262	.0000463	.0000796	.0001333	.0002179	.0003479	.0005437	.0008324
19	.0000049	.0000091	.0000165	.0000289	.0000496	.0000829	.0001355	.0002167
20	.0000008	.0000016	.0000030	.0000055	.0000098	.0000171	.0000293	.0000490
21	.0000001	.0000002	.0000005	.0000009	.0000017	.0000031	.0000055	.0000095
22			.0000001	.0000003	.0000007	.0000013	.0000023	.0000045
23				.0000001	.0000002	.0000004	.0000008	.0000016

λ	.33	.34	.35	.36	.37	.38	.39	.40
1	.9999910	.9999942	.9999962	.9999976	.9999985	.9999990	.9999994	.9999996
2	.9998618	.9999068	.9999376	.9999585	.9999727	.9999821	.9999884	.9999925
3	.9989715	.9992771	.9994957	.9996509	.9997603	.9998367	.9998896	.9999260
4	.9950246	.9963573	.9973542	.9980937	.9986377	.9990344	.9993214	.9995271
5	.9823886	.9865805	.9898589	.9924000	.9943521	.9958384	.9969599	.9977965
6	.9512703	.9613979	.9696793	.9763866	.9817677	.9860442	.9894109	.9920364
7	.8899624	.9095065	.9262156	.9403565	.9522043	.9620325	.9701051	.9766707

$$S(n, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 29

X_p	.33	.34	.35	.36	.37	.38	.39	.40
9	.7907437	.8216723	.8493181	.8733650	.8951556	.9136772	.9295494	.9430187
10	.6563588	.6972412	.7354508	.7707863	.8030174	.8321751	.8582450	.8813062
11	.5019142	.5476734	.5923867	.6355374	.6747539	.7156104	.7518785	.7853184
12	.3427748	.3935725	.4383176	.4834586	.5284445	.5727434	.6150532	.6573346
13	.2303427	.2864533	.3350926	.3854809	.4379949	.4914866	.5458483	.6009974
14	.1547174	.2150461	.2798844	.3489934	.4224460	.4994000	.5789755	.6609943
15	.0931266	.1611174	.2377882	.3239761	.4196640	.5249750	.6399755	.7649755
16	.0484571	.0970818	.1745367	.2803150	.4154404	.5809770	.7669770	.9649770
17	.0113810	.0354432	.0820632	.0271494	.0332165	.0480685	.0658991	.0799228
18	.0040210	.0136859	.0373947	.0101257	.0145963	.0193978	.0254245	.0326943
19	.0012439	.0048427	.0136697	.0038041	.0053355	.0073709	.0100363	.0134769
20	.0003390	.0015225	.0047890	.0011710	.0017096	.0024566	.0034773	.0048914
21	.0000802	.0003888	.0012888	.0003327	.0005136	.0007467	.0010496	.0015228
22	.0000163	.0000773	.0000449	.0000224	.00001146	.00001785	.00002735	.00004125
23	.0000028	.0000042	.0000005	.00000142	.00000033	.00000081	.00000131	.00000254
24	.0000004	.0000004	.0000001	.00000034	.00000041	.00000067	.00000114	.00000186
25	.0000000	.0000001	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
26	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
27	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
28	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
29	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
30	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
31	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
32	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
33	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
34	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
35	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
36	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
37	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
38	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
39	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
40	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
41	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
42	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
43	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
44	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
45	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
46	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
47	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
48	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
49	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
50	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
51	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
52	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
53	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
54	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
55	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
56	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
57	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
58	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
59	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
60	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
61	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
62	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
63	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
64	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
65	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
66	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
67	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
68	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
69	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
70	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
71	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
72	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
73	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
74	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
75	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
76	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
77	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
78	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
79	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
80	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
81	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
82	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
83	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
84	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
85	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
86	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
87	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
88	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
89	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
90	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
91	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
92	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
93	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
94	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
95	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
96	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
97	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
98	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
99	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
100	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000

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$$f(x, y, z) = \sum_{i=1}^n \sum_{j=1}^m \sum_{k=1}^p f_{ijk} x_i y_j z_k$$

n = 30

	.01	.02	.03	.04	.05	.06	.07	.08
1	.2602996	.4545157	.5989929	.7061434	.7653612	.8437444	.8666325	.9100318
2	.0361400	.1204557	.2269245	.3388203	.4464579	.5445315	.6306415	.7042049
3	.0051177	.0217178	.0600691	.1168986	.1870212	.2676008	.3518534	.4348036
4	.0002226	.0088935	.0211906	.0305929	.0407716	.0526203	.0549407	.0615931
5	.0000116	.0063003	.0018497	.0063200	.0156355	.0315304	.0526166	.0877619
6	.0000005	.0000351	.0002326	.0010608	.0033885	.0079452	.0142317	.0292079
7		.0000017	.0000342	.0001478	.0005735	.0016705	.0039912	.0082460
8		.0000001	.0000021	.00000174	.00000146	.00000071	.00000327	.00019737
9			.0000002	.00000017	.00000167	.00000451	.0001487	.0004044
10				.0000002	.0000012	.0000059	.0000230	.0000720
11					.0000001	.0000007	.0000031	.0000111
12						.0000001	.0000004	.0000015
13								.0000008

	.09	.10	.11	.12	.13	.14	.15	.16
1	.3409470	.5760888	.6958020	.7783987	.8446607	.8921610	.9233693	.9484977
2	.7457349	.8163050	.8572671	.8900297	.9159425	.9366316	.9519711	.9640765
3	.5144692	.5886408	.6580043	.7153000	.7670155	.8118915	.8485994	.8796363
4	.2883516	.3525608	.4234053	.4929169	.5521645	.6014592	.6403401	.6725504
5	.1876941	.2754949	.3295210	.3880233	.4399032	.4820660	.5155313	.5365143
6	.0480634	.0731901	.1049136	.1430769	.1871493	.2362888	.2894243	.3453463
7	.0158406	.0250268	.0407487	.0606074	.0838179	.1165175	.1525810	.1936856
8	.0041214	.0077836	.0135469	.0220502	.0339043	.0496863	.0697850	.0945427
9	.0006575	.0020190	.0038073	.0069340	.0116023	.0183814	.0277782	.0402831
10	.0001226	.0004544	.0009680	.0018253	.0034543	.0059313	.0096576	.0150193
11	.0000337	.0000891	.0002103	.0004524	.0009001	.0016731	.0029424	.0049138
12	.0000052	.0000153	.0000400	.0000946	.0002056	.0004153	.0007077	.00114161
13	.0000007	.0000023	.0000067	.0000174	.0000413	.0000906	.0001857	.0003586
14	.0000001	.0000003	.0000010	.0000028	.0000073	.0000174	.0000386	.0000802
15			.0000001	.0000004	.0000011	.0000030	.0000071	.0000150
16				.0000001	.0000002	.0000004	.0000011	.0000028
17					.0000001	.0000001	.0000002	.0000004
18								.0000001

	.17	.18	.19	.20	.21	.22	.23	.24
1	.9962646	.9974033	.9982030	.9987621	.9991512	.9994208	.9996067	.9997343
2	.9733110	.9803034	.9855574	.9894775	.9923022	.9945198	.9960823	.9972170
3	.9051449	.9258754	.9425466	.9558210	.9668914	.9744758	.9808177	.9856907
4	.7740338	.8143644	.8483832	.8772892	.9015600	.9217105	.9382514	.9517188
5	.5946748	.6421378	.6892910	.7447667	.7854121	.8212535	.8524594	.8793017
6	.4027947	.4605377	.5174355	.5724876	.6248633	.6739166	.7191869	.7603923
7	.2370415	.2880176	.3396960	.3930301	.4470403	.5007642	.5533175	.6039259
8	.1040479	.1582117	.1967520	.2392094	.2840738	.3333201	.3834475	.4345809
9	.0563333	.0762789	.1003531	.1286500	.1611161	.1977502	.2375649	.2807189
10	.0224307	.0323150	.0450791	.0610071	.0806346	.1039255	.1310544	.1619945
11	.0070485	.0120487	.0178515	.0256163	.0357076	.0484768	.0642407	.0832616
12	.0024101	.0039601	.0062393	.0094931	.0139938	.0204416	.0284547	.0380566
13	.0006570	.0011489	.0019366	.0031110	.0048547	.0073410	.0107934	.0154538
14	.0001574	.0002944	.0005258	.0009019	.0014910	.0023837	.0036957	.0055703
15	.0000334	.0000667	.0001269	.0002312	.0004052	.0006852	.0011214	.0017805
16	.0000062	.0000133	.0000270	.0000524	.0000974	.0001743	.0003011	.0005040
17	.0000010	.0000023	.0000051	.0000105	.0000207	.0000391	.0000714	.0001261
18	.0000001	.0000004	.0000008	.0000018	.0000039	.0000077	.0000149	.0000278
19			.0000001	.0000003	.0000006	.0000013	.0000027	.0000054
20				.0000001	.0000001	.0000002	.0000004	.0000009
21							.0000001	.0000001

	.25	.26	.27	.28	.29	.30	.31	.32
1	.9998714	.9998806	.9999206	.9999475	.9999655	.9999775	.9999854	.9999906
2	.9990356	.9986222	.9981039	.9973353	.9965428	.9956877	.9947881	.9938572
3	.9894041	.9822113	.9743165	.9658829	.9570395	.9478860	.9385028	.9289472
4	.9625507	.9411879	.9170109	.8935522	.8714963	.8506834	.8311135	.8129504
5	.9021304	.8712844	.8375030	.8045899	.7714852	.7392451	.7079297	.6775845
6	.7974019	.7602337	.7259099	.6939414	.6635019	.6344052	.6065868	.5801187
7	.6519457	.6268744	.6033527	.5811585	.5601954	.5404770	.5219109	.5045204
8	.4857100	.4622254	.4405472	.4204479	.4017008	.3842233	.3679069	.3527488
9	.3264008	.3139482	.3026477	.2921715	.2824066	.2732881	.2647616	.2567791
10	.1965934	.1845749	.1735496	.1632097	.1534450	.1441913	.1354866	.1272759
11	.1057281	.1017401	.0981267	.0948906	.0919202	.0892072	.0867494	.0845401
12	.0806583	.0766071	.0728464	.0693912	.0662362	.0632810	.0605286	.0579723
13	.0515936	.0485016	.0456497	.0430783	.0407707	.0387101	.0368826	.0352723
14	.0381728	.0357228	.0334273	.0312845	.0293825	.0276191	.0260825	.0247591
15	.0227495	.0211376	.0196074	.0182315	.0169916	.0158813	.0148957	.0140293
16	.0080190	.0072948	.0066956	.0062033	.0058149	.0055200	.0053164	.0051860
17	.0020157	.0018585	.0017292	.0016249	.0015347	.0014577	.0013924	.0013386
18	.0005051	.0004675	.0004387	.0004160	.0003971	.0003816	.0003682	.0003566
19	.0001102	.0001018	.0000935	.0000858	.0000784	.0000721	.0000662	.0000604
20	.0000018	.0000003	.0000006	.0000012	.0000023	.0000043	.0000082	.0000127
21	.0000003	.0000006	.0000011	.0000022	.0000040	.0000073	.0000129	.0000223
22		.0000001	.0000002	.0000003	.0000007	.0000013	.0000023	.0000041
23				.0000001	.0000001	.0000002	.0000003	.0000007
24								.0000001

	.33	.34	.35	.36	.37	.38	.39	.40
1	.9999939	.9999961	.9999976	.9999985	.9999990	.9999994	.9999996	.9999998
2	.9999044	.9999065	.9999081	.9999092	.9999100	.9999105	.9999107	.9999108
3	.9992653	.9992612	.9992504	.9992371	.9992219	.9992051	.9991868	.9991672
4	.9963270	.9963500	.9963037	.9962543	.9962030	.9961499	.9960950	.9960386
5	.9965585	.9965906	.9965423	.9964940	.9964458	.9963967	.9963468	.9962961
6	.9615393	.9615600	.9615722	.9615815	.9615880	.9615916	.9615935	.9615948

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X	.01	.02	.03	.04	.05	.06	.07	.08
1	.2676966	.4654254	.6110231	.7178367	.7940942	.8531197	.8974683	.9304911
2	.0383895	.1272251	.2308086	.3483132	.4688411	.5924944	.7192728	.8491762
3	.0016460	.0636944	.1650748	.3125735	.4970513	.7086194	.9372778	.1184221
4	.0002535	.0032700	.0113496	.0340450	.0712440	.1120197	.1562716	.2039991
5	.00001137	.0001532	.0002153	.0003009	.0004197	.0005728	.0007610	.0009854
6	.0000004	.00000306	.00000811	.00001712	.00003201	.0000547	.0000863	.0001269
7		.00000022	.00000305	.00000847	.00001709	.0000327	.0000544	.0000860
8		.00000001	.00000028	.00000028	.00000091	.0000017	.0000033	.0000054
9			.00000002	.00000024	.0000014	.0000024	.0000036	.0000056
10				.00000002	.00000016	.00000083	.0000016	.0000026
11					.00000002	.00000017	.00000045	.0000009
12						.00000001	.00000006	.00000009
13							.00000001	.00000001

X	.09	.10	.11	.12	.13	.14	.15	.16
1	.0462614	.0618480	.0770173	.0928992	.1084947	.1238039	.1388268	.1535632
2	.7415043	.8304354	.8826327	.9076247	.9247727	.9431411	.9617748	.9806982
3	.5370831	.6114144	.6779852	.7362777	.7863234	.8282741	.8621051	.8878462
4	.3034060	.3751595	.4489592	.5126628	.5663617	.6100613	.6437724	.6674979
5	.1416295	.1932015	.2508490	.3127864	.3771331	.4428991	.5090724	.5657562
6	.0552303	.0834204	.1184205	.1594945	.2058973	.2568094	.3117343	.3700731
7	.0182210	.0305531	.0479015	.0705037	.0984916	.1318954	.1707378	.2149099
8	.0051229	.0085879	.0135411	.0206770	.0300411	.0418027	.0550344	.0707922
9	.0012423	.0025952	.0040502	.0057480	.0077456	.0100013	.0135792	.0185424
10	.0002614	.00068109	.0012891	.00204939	.0030152	.0041743	.0055475	.0071451
11	.0000480	.0001255	.0002917	.0005425	.0009123	.0013209	.0017782	.0022947
12	.0000077	.0000227	.0000587	.0001176	.0002253	.0003917	.0006179	.0009154
13	.0000011	.0000036	.0000104	.0000247	.0000527	.0001161	.0002260	.0003927
14	.0000001	.0000000	.0000016	.0000046	.0000117	.0000277	.0000540	.0001048
15		.00000001	.0000002	.0000007	.0000019	.0000057	.0000119	.0000251
16				.00000001	.0000003	.0000008	.0000026	.0000059
17					.00000001	.0000001	.0000003	.0000007
18						.00000001	.00000001	.00000001

X	.17	.18	.19	.20	.21	.22	.23	.24
1	.0968094	.0978707	.0985444	.0990094	.0993204	.0995401	.0996872	.0997691
2	.0772138	.0833814	.0879600	.0913344	.0934737	.0953601	.0969920	.0983832
3	.0167332	.0336724	.0507187	.0652523	.0771706	.0863882	.0928966	.0968457
4	.0069867	.0134434	.0202742	.0262956	.0315536	.0361682	.0401498	.0435971
5	.00253019	.0048876	.0072614	.0095712	.0118071	.0139740	.0160724	.0181026
6	.00054143	.00104857	.00151080	.00192414	.00229786	.00263307	.0029306	.0031904
7	.00018706	.0003875	.0005765	.00075214	.00091332	.00106077	.00119478	.00131574
8	.00005068	.00010804	.00016114	.00021075	.00025678	.00029947	.00033894	.00037531
9	.00001448	.00002869	.00004382	.00005985	.00007682	.00009374	.00011061	.00012742
10	.00000441	.00000885	.00001329	.00001772	.00002215	.00002658	.00003091	.00003524
11	.000001275	.00000255	.00000384	.00000512	.00000641	.00000770	.00000900	.00001029
12	.000000342	.00000068	.00000102	.00000136	.00000170	.00000204	.00000238	.00000272
13	.000000056	.00000011	.00000016	.00000021	.00000026	.00000031	.00000036	.00000041
14	.000000025	.00000005	.00000007	.00000009	.00000012	.00000015	.00000018	.00000021
15	.000000015	.00000003	.00000004	.00000006	.00000008	.00000010	.00000013	.00000016
16	.000000009	.00000002	.00000003	.00000004	.00000006	.00000008	.00000010	.00000013
17	.000000005	.00000001	.00000002	.00000003	.00000004	.00000006	.00000008	.00000010
18	.000000003	.00000000	.00000001	.00000002	.00000003	.00000004	.00000006	.00000008
19		.00000000	.00000000	.00000001	.00000002	.00000003	.00000005	.00000007
20			.00000000	.00000001	.00000002	.00000003	.00000005	.00000007
21				.00000001	.00000002	.00000003	.00000005	.00000007

X	.25	.26	.27	.28	.29	.30	.31	.32
1	.0998861	.0999117	.0999421	.0999622	.0999755	.0999842	.0999899	.0999916
2	.09984821	.0998494	.0998277	.09983067	.0998454	.0998726	.09988492	.0998999
3	.0915620	.0938741	.0955916	.0968496	.0977655	.0984271	.0989012	.0992184
4	.0822640	.0846540	.0862413	.0870258	.0879638	.0889444	.0898782	.0907623
5	.0722355	.0742918	.0760294	.0774693	.0786154	.0794966	.0801333	.0806179
6	.0623380	.0633913	.0640140	.0642663	.0641500	.0637372	.0630423	.0621286
7	.0528307	.0531547	.0527932	.0517776	.0501773	.0480372	.0453272	.0421761
8	.0427269	.0427992	.0424587	.0418649	.0410323	.0399794	.0387194	.0372362
9	.0342281	.0341403	.0338766	.0334709	.0329310	.0322645	.0314873	.0305921
10	.0290452	.02908120	.02912661	.02917974	.0292354	.0292938	.0293549	.0294194
11	.0284444	.0284772	.0284140	.02832176	.0281988	.0280381	.02784301	.0276139
12	.0244257	.02431273	.02412080	.0238771	.0235828	.0232414	.0228594	.0224330
13	.0228894	.0227035	.0224182	.0220495	.0216044	.0210825	.0204967	.0198510
14	.0213328	.0210353	.0206487	.0201728	.0196173	.0189827	.0182692	.0174829
15	.02041049	.0200097	.01958726	.0191590	.0187144	.01815719	.01749361	.0167294
16	.02011014	.02020340	.02030980	.02042672	.02055499	.02069494	.02084698	.02101149
17	.02033645	.02040019	.02046222	.02052287	.02058227	.02064044	.02069747	.02076344
18	.02059914	.02064040	.02067651	.02070733	.02073287	.02075328	.02076869	.02077919
19	.02089202	.02091657	.02093566	.02094918	.02095710	.02096046	.02096024	.02095747
20	.02110037	.02111037	.02111619	.02111750	.02111530	.02110964	.02110064	.02108829
21	.02130007	.02130013	.02130026	.02130049	.02130070	.02130087	.02130099	.02130107
22	.02150001	.02150002	.02150004	.02150008	.02150016	.02150031	.02150054	.02150089
23			.02170001	.02170001	.02170001	.02170001	.02170001	.02170001
24				.02190001	.02190001	.02190001	.02190001	.02190001

X	.33	.34	.35	.36	.37	.38	.39	.40
1	.0999950	.0999978	.0999994	.0999999	.0999999	.0999999	.0999999	.0999999
2	.09999340	.09999368	.09999379	.09999381	.09999384	.09999387	.09999390	.09999391
3	.09999748	.09999786	.09999811	.09999830	.09999844	.09999853	.09999858	.09999861
4	.09999847	.09999874	.09999891	.09999901	.09999911	.09999918	.09999923	.09999927
5	.09999891	.09999911	.09999924	.09999934	.09999940	.09999944	.09999947	.09999949
6	.09999938	.09999948	.09999958	.09999968	.09999978	.09999988	.09999998	.09999999
7		.09999958	.09999968	.09999978	.09999988	.09999998	.09999999	.09999999
8			.09999968	.09999978	.09999988	.09999998	.09999999	.09999999
9				.09999978	.09999988	.09999998	.09999999	.09999999
10					.09999988	.09999998	.09999999	.09999999
11						.09999998	.09999999	.09999999
12							.09999999	.09999999
13								.09999999
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24								.09999999

$$F(x, y, z) = \sum_{n=0}^{\infty} \frac{(-1)^n}{n!} \left(\frac{\partial}{\partial x} \right)^n \left(\frac{\partial}{\partial y} \right)^n \left(\frac{\partial}{\partial z} \right)^n F(x, y, z)$$

n = 51

X	.33	.34	.35	.36	.37	.38	.39	.40
7	.9271380	.9417051	.9537879	.9637040	.9717568	.9782284	.9833754	.9874267
8	.8521004	.8772448	.8990507	.9177501	.9336089	.9469120	.9579508	.9670123
9	.7412241	.7776243	.8106291	.8402029	.8663959	.8893303	.9091858	.9261836
10	.6016634	.6464741	.6889549	.7287288	.7655171	.7991396	.8295092	.8566236
11	.4504379	.4978172	.5448178	.5907795	.6351754	.6775277	.7174397	.7546023
12	.3082407	.3516571	.3966489	.4426409	.4890346	.5352310	.5806514	.6247570
13	.1915118	.2261489	.2636769	.3037609	.3454867	.3898742	.4348935	.4804844
14	.1074830	.1316521	.1590302	.1895855	.2231996	.2596662	.2986934	.3399111
15	.0542707	.0690633	.0865825	.1070122	.1304829	.1570599	.1867350	.2194197
16	.0245671	.0328216	.0423708	.0543718	.0688769	.0857871	.1056111	.1283817
17	.0099370	.0136970	.0185645	.0247615	.0325256	.0421338	.0537419	.0674898
18	.0035789	.0051404	.0072539	.0100652	.0137416	.0184800	.0244858	.0319866
19	.0011432	.0017120	.0025169	.0036356	.0051642	.0072185	.0099362	.0134769
20	.0003224	.0005036	.0007717	.0011611	.0017166	.0024960	.0035716	.0050330
21	.0000798	.0001301	.0002079	.0003259	.0005018	.0007593	.0011300	.0016554
22	.0000172	.0000293	.0000488	.0000798	.0001280	.0002017	.0003124	.0004759
23	.0000032	.0000057	.0000099	.0000169	.0000283	.0000464	.0000748	.0001185
24	.0000006	.0000010	.0000017	.0000031	.0000053	.0000091	.0000153	.0000253
25	.0000001	.0000001	.0000003	.0000005	.0000009	.0000015	.0000026	.0000045
26				.0000001	.0000001	.0000002	.0000004	.0000007
27							.0000001	.0000001

X	.41	.42	.43	.44	.45	.46	.47	.48
1	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	.9999982	.9999989	.9999993	.9999996	.9999998	.9999999	.9999999	1.0000000
3	.99999805	.99999876	.99999922	.99999951	.99999970	.99999982	.99999989	.99999993
4	.99999617	.99999855	.99999900	.999999610	.999999750	.999999841	.999999900	.999999918
5	.999992836	.99999072	.99998644	.99997737	.9999489	.9999002	.9999348	.9999579
6	.9971145	.9979383	.9985415	.9989787	.9992921	.9995145	.9996707	.9997790
7	.9905834	.9930132	.9948710	.9962718	.9973180	.9980908	.9986555	.9990636
8	.9743711	.9802831	.9849818	.9886762	.9915493	.9937593	.9954404	.9967050
9	.9405744	.9526235	.9626010	.9707720	.9773897	.9826898	.9868871	.9901735
10	.8805551	.9014375	.9194536	.9348217	.9477834	.9585921	.9675032	.9747658
11	.7887967	.8198928	.8478439	.8726790	.8944921	.9134313	.9296862	.9434764
12	.6670649	.7071618	.7447124	.7794649	.8112520	.8399879	.8656633	.8883370
13	.5260761	.5711071	.6150441	.6573989	.6977427	.7357164	.7710383	.8035072
14	.3828814	.4271128	.4720764	.5172242	.5620078	.6058969	.6483966	.6890622
15	.2549424	.2930492	.3334086	.3756191	.4192217	.4637136	.5085658	.5532374
16	.1541813	.1830246	.2148516	.2495232	.2868201	.3264454	.3680302	.4111438
17	.0841610	.1031516	.1254159	.1504478	.1784915	.2095131	.2434049	.2799804
18	.0412272	.0524450	.0658810	.0817611	.1002864	.1216229	.1458901	.1731506
19	.0180220	.0237734	.0309505	.0397855	.0505194	.0633911	.0786614	.0964522
20	.0069886	.0095677	.0129207	.0172202	.0226595	.0294509	.0378220	.0480111
21	.0023883	.0033956	.0047399	.0065821	.0089828	.0121037	.0161084	.0211822
22	.0007138	.0010544	.0015351	.0022039	.0031214	.0043632	.0060223	.0082100
23	.0001848	.0002838	.0004293	.0006402	.0009415	.0013661	.0019565	.0027671
24	.0000410	.0000654	.0001029	.0001595	.0002436	.0003670	.0005457	.0008011
25	.0000077	.0000127	.0000208	.0000335	.0000532	.0000831	.0001287	.0001962
26	.0000012	.0000021	.0000035	.0000058	.0000096	.0000157	.0000252	.0000398
27	.0000001	.0000003	.0000005	.0000008	.0000014	.0000024	.0000040	.0000065
28				.0000001	.0000002	.0000003	.0000005	.0000008
29							.0000001	.0000001

X	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	.9999994	.9999998
4	.9999962	.9999977
5	.9999731	.9999830
6	.9998534	.9999039
7	.9993551	.9995610
8	.9976454	.9983366
9	.9927171	.9946631
10	.9806167	.9852753
11	.9550397	.9646222
12	.9081258	.9251936
13	.8330022	.8594792
14	.7271119	.7634352
15	.5472003	.6399499
16	.4353054	.5000000
17	.3189751	.3600501
18	.2034010	.2365648
19	.1170351	.1405208
20	.0602600	.0748064
21	.0275308	.0353778
22	.0110593	.0147247
23	.0038558	.0053369
24	.0011614	.0016634
25	.0002953	.0004390
26	.0000622	.0000961
27	.0000106	.0000170
28	.0000014	.0000023
29	.0000001	.0000002

$$I(0, n, p) = \sum_{i=0}^n \binom{n}{i} p^i (1-p)^{n-i}$$

n = 32

p	.01	.02	.03	.04	.05	.06	.07	.08
1	.8750197	.4761169	.6226924	.7291808	.8062885	.8619325	.9019485	.9306838
2	.0404886	.1339891	.2492747	.3680885	.4800376	.5799224	.6657814	.7375770
3	.0019034	.0257650	.0702651	.1348831	.2138855	.3009124	.3902531	.4773835
4	.0000161	.0034785	.0149013	.0377142	.0738055	.1228209	.1829662	.2511283
5		.0004105	.0024873	.0083611	.0203439	.0404062	.0696954	.1084891
6	.0000007	.0000371	.0003372	.0015120	.0045997	.0109474	.0219933	.0390300
7		.0000028	.0000380	.0002278	.0008685	.0024858	.0058361	.0118504
8		.0000002	.0000036	.0000221	.0001391	.0004797	.0011190	.0023719
9			.0000003	.0000032	.0000191	.0000795	.0002556	.0006464
10				.0000003	.0000023	.0000114	.0000433	.0001332
11					.0000002	.0000014	.0000064	.0000226
12						.0000002	.0000008	.0000034
13							.0000001	.0000004
14								.0000001
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$$P(c, n, p) = \sum_{r=0}^c \binom{n}{r} p^r (1-p)^{n-r}$$

n = 32

Φ	.33	.34	.35	.36	.37	.38	.39	.40
4	.9980159	.9986100	.9990346	.9993354	.9995466	.9996934	.9997946	.9998617
5	.9982819	.9988843	.9993181	.9996256	.9998422	.9999510	.9999811	.9999984
6	.9763912	.9820774	.9865207	.9899573	.9925002	.9944820	.9960773	.9974079
7	.9412150	.9536174	.9637501	.9716390	.9784461	.9835649	.9871779	.9894543
8	.8768628	.8991613	.9182087	.9342935	.9477236	.9580122	.9668664	.9751781
9	.7778133	.8114953	.8415767	.8681199	.8912647	.9112114	.9282001	.9425151
10	.6477184	.6910652	.7315409	.7688598	.8028423	.8334121	.8605930	.8844478
11	.5003423	.5401737	.5852658	.6404413	.6834018	.7237402	.7611460	.7954108
12	.3551658	.4013583	.4485081	.4959700	.5431067	.5893037	.6339988	.6760951
13	.2300123	.2688217	.3102172	.3537577	.3989144	.4451078	.4917391	.5381934
14	.1352125	.1637810	.1956565	.2306806	.2686309	.3091452	.3518114	.3961404
15	.0718108	.0903435	.1119392	.1367386	.1647881	.1960503	.2303988	.2676362
16	.0343693	.0449458	.0578449	.0733323	.0916036	.1126708	.1374294	.1647939
17	.0147650	.0200974	.0268967	.0354212	.0459359	.0587035	.0739727	.0919664
18	.0056771	.0080497	.0112126	.0153559	.0206929	.0274571	.0358969	.0462691
19	.0019470	.0028777	.0041748	.0059503	.0083305	.0114979	.0156106	.0208816
20	.0005533	.0009145	.0013825	.0020519	.0029422	.0042905	.0060530	.0083405
21	.0001599	.0002571	.0004052	.0006266	.0009513	.0014192	.0020822	.0030064
22	.0000379	.0000636	.0001045	.0001684	.0002663	.0004131	.0006113	.0008947
23	.0000078	.0000137	.0000235	.0000396	.0000652	.0001054	.0001657	.0002615
24	.0000014	.0000026	.0000046	.0000081	.0000138	.0000237	.0000385	.0000626
25	.0000002	.0000004	.0000008	.0000014	.0000025	.0000044	.0000076	.0000128
26		.0000001	.0000003	.0000006	.0000010	.0000017	.0000028	.0000046
27						.0000001	.0000002	.0000003
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$$H(x, y, z) = \sum_{n=0}^{\infty} \frac{1}{n!} \left(\frac{\partial}{\partial x} \right)^n \left(\frac{\partial}{\partial y} \right)^n \left(\frac{\partial}{\partial z} \right)^n$$

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.2832295	.4665945	.6340117	.7400136	.8159741	.8702166	.9080121	.9361739
2	.0430260	.1408116	.2604772	.3825322	.4963501	.5968430	.6821331	.7540907
3	.0043603	.0279295	.0756354	.1442113	.2371931	.3476530	.4695400	.5961900
4	.0003248	.0041202	.0165622	.0416009	.0808095	.1335064	.2073012	.2962207
5	.0000108	.0004759	.0028597	.0095352	.0230265	.0453511	.0774177	.1159000
6	.0000009	.0000445	.0004017	.0017860	.0053075	.0127149	.0253324	.0445447
7		.0000035	.0000470	.0002792	.0010551	.0029933	.0066671	.0124027
8		.0000002	.0000046	.0000370	.0001754	.0006001	.0016353	.0037741
9			.0000004	.0000042	.0000251	.0001036	.0003109	.0007772
10				.0000004	.0000031	.0000155	.0000582	.0001772
11					.0000003	.0000020	.0000090	.0000315
12						.0000002	.0000012	.0000049
13							.0000001	.0000007
14								.0000001

x	.09	.10	.11	.12	.13	.14	.15	.16
1	.9554994	.9690960	.9786260	.9852793	.9899043	.9931064	.9953178	.9968284
2	.8102611	.8587853	.8914528	.9190362	.9401222	.9560731	.9680233	.9768946
3	.5804336	.6543425	.7190630	.7745056	.8211539	.8596142	.8906799	.9151400
4	.3455549	.4230563	.4988966	.5708493	.6373290	.6973540	.7504540	.7968608
5	.1713316	.2503179	.3248090	.3925642	.4513771	.4992456	.5364823	.5637699
6	.0713926	.1061086	.1450011	.1878297	.2320048	.2741176	.3117376	.3437649
7	.0258669	.0417030	.0641247	.0929986	.1284140	.1700916	.2173759	.2653770
8	.0076711	.0141018	.0233970	.0378602	.0566025	.0800674	.1067572	.1350711
9	.0020153	.0041344	.0077382	.0134239	.0218449	.0336508	.0484793	.0659221
10	.0004615	.0010580	.0021905	.0041677	.0073849	.0123118	.0194511	.0284376
11	.0000927	.0002377	.0005447	.0011384	.0021992	.00419737	.0067767	.0109853
12	.0000164	.0000471	.0001196	.0002746	.0005790	.0011349	.0020884	.0036383
13	.0000026	.0000083	.0000233	.0000587	.0001358	.0002876	.0005716	.0010700
14	.0000004	.0000013	.0000040	.0000112	.0000281	.0000648	.0001372	.0002834
15		.0000002	.0000006	.0000019	.0000052	.0000130	.0000362	.0000754
16			.0000001	.0000003	.0000009	.0000023	.0000058	.0000131
17				.0000001	.0000001	.0000004	.0000010	.0000024
18					.0000001	.0000001	.0000002	.0000004
19						.0000001	.0000001	.0000001

x	.17	.18	.19	.20	.21	.22	.23	.24
1	.9978641	.9985603	.9990450	.9993862	.9995815	.9997251	.9998204	.9998834
2	.9834276	.9861871	.9886328	.9911371	.9939104	.9971668	.9990506	.9996670
3	.9461177	.9517715	.9583908	.9673203	.9790264	.9936213	.9995019	.9998205
4	.8859877	.8991471	.9166591	.9391073	.9674075	.9919716	.9994835	.9998456
5	.6821737	.7331544	.7743507	.8170743	.8518012	.8807897	.9049545	.9252277
6	.4991500	.5529339	.6173928	.6700704	.7200698	.7664343	.8036628	.8336042
7	.3247985	.3625225	.4412003	.4995825	.5565322	.6110721	.6624133	.7099777
8	.1868208	.2323106	.3017880	.3343157	.3808524	.4443264	.4966750	.5539151
9	.0949741	.1251474	.1602607	.2000364	.2439935	.2914762	.3416920	.3937179
10	.0427107	.0598040	.0810763	.1067869	.1370208	.1717218	.2106095	.2532693
11	.0170317	.0253791	.0364984	.0508371	.0680779	.0886572	.1126386	.1407719
12	.0060310	.0095788	.0146347	.0215907	.0308589	.0428509	.0579484	.0764884
13	.0019003	.0032201	.0052324	.0081861	.0123745	.0181291	.0258085	.0357840
14	.0005338	.0009654	.0016697	.0027727	.0044337	.0068657	.0103015	.0159116
15	.0001334	.0002583	.0004759	.0008393	.0014230	.0023274	.0036039	.0053637
16	.0000299	.0000617	.0001212	.0002271	.0004081	.0007060	.0011772	.0019059
17	.0000060	.0000132	.0000275	.0000549	.0001046	.0001915	.0003375	.0005458
18	.0000011	.0000025	.0000056	.0000118	.0000240	.0000464	.0000864	.0001554
19	.0000002	.0000004	.0000010	.0000023	.0000049	.0000109	.0000217	.0000437
20		.0000001	.0000002	.0000004	.0000009	.0000019	.0000040	.0000080
21			.0000001	.0000001	.0000001	.0000001	.0000001	.0000001
22				.0000001	.0000001	.0000001	.0000001	.0000001

	.25	.26	.27	.28	.29	.30	.31	.32
1	.9999247	.9999516	.9999691	.9999804	.9999877	.9999921	.9999942	.9999957
2	.99990954	.9999307	.9999522	.9999729	.9999822	.9999882	.9999929	.9999951
3	.9998760	.99982374	.999873619	.99981650	.99987317	.99981338	.99984114	.99986011
4	.9998439	.9984780	.9988377	.9918797	.9991435	.99988129	.99970122	.99962141
5	.9413916	.9546120	.9651920	.9735277	.9800825	.9851404	.9890151	.9919577
6	.8678083	.9314130	.9144667	.9321988	.9467716	.9586118	.9681249	.9756855
7	.7533455	.7223411	.6866141	.6511583	.6182774	.5855545	.5524257	.5199358
8	.6061790	.6557341	.7002099	.7435975	.7832432	.8184678	.8494257	.8751057
9	.4467486	.4974722	.5451668	.5893533	.6304573	.6688733	.7047906	.7383206
10	.2991298	.3494990	.3976132	.4436524	.4877958	.5302519	.5702206	.6073267
11	.1810312	.2191216	.2606854	.3052172	.3521061	.4006643	.4501575	.4998381
12	.0907215	.1248024	.1647723	.2083855	.2559743	.30666102	.3594257	.4135756
13	.0484311	.0640586	.0827481	.1031914	.1258213	.1508243	.1781706	.2076906
14	.0131622	.0194877	.0251193	.0311935	.0378201	.0450181	.0527945	.0611585
15	.0084307	.0123226	.0174193	.02381725	.03162408	.04073792	.0511744	.0629349
16	.0029931	.0045698	.0067996	.00987770	.0140275	.0195050	.0264862	.0350562
17	.0009510	.0015253	.0023808	.0036222	.0053897	.00770227	.01061258	.0151558
18	.000303	.0004564	.0007101	.0011914	.0018179	.0026131	.0037092	.00516023
19	.0000686	.0001216	.0002001	.0003497	.0005697	.0009054	.0014060	.0021352
20	.0000155	.0000289	.0000522	.0000915	.0001563	.0002600	.0004221	.0006699
21	.0000031	.0000061	.00000116	.00000213	.00000381	.00000684	.00001186	.00001861
22	.0000006	.00000123	.00000023	.00000043	.00000076	.00000136	.00000236	.00000386
23	.0000001	.00000026	.00000004	.00000008	.00000016	.00000030	.00000055	.00000091
24			.00000001	.00000001	.00000005	.00000005	.00000010	.00000015
25					.00000001	.00000009	.00000009	.00000001

N	.33	.34	.35	.36	.37	.38	.39	.40
1	.9997352	.9998246	.9998840	.9999250	.9999516	.9999691	.9999804	.9999877
2	.9995477	.9996974	.9997314	.9997534	.9997676	.9997721	.9997769	.9997815
3	.9994607	.9995813	.9996089	.9996289	.9996425	.9996504	.9996576	.9996641
4	.9993805	.9994616	.9994998	.9995299	.9995525	.9995681	.9995767	.9995841
5	.9993031	.9993529	.9993719	.9993845	.9993939	.9994014	.9994078	.9994139
6	.9992290	.9992471	.9992548	.9992609	.9992657	.9992694	.9992721	.9992739
7	.9991597	.9991501	.9991407	.9991305	.9991196	.9991081	.9990960	.9990834
8	.9990947	.9990741	.9990529	.9990311	.9990087	.9989857	.9989621	.9989380
9	.9990497	.9990181	.9989859	.9989531	.9989198	.9988860	.9988517	.9988169
10	.9990147	.9989721	.9989289	.9988851	.9988407	.9987958	.9987504	.9987046
11	.9989794	.9989268	.9988736	.9988198	.9987654	.9987105	.9986551	.9986000
12	.9989444	.9988818	.9988186	.9987548	.9986904	.9986255	.9985601	.9984942
13	.9989094	.9988368	.9987636	.9986898	.9986154	.9985405	.9984651	.9983892
14	.9988744	.9987918	.9987086	.9986248	.9985404	.9984555	.9983701	.9982842
15	.9988394	.9987468	.9986536	.9985598	.9984654	.9983705	.9982751	.9981792
16	.9988044	.9987018	.9986086	.9985148	.9984204	.9983255	.9982301	.9981342
17	.9987694	.9986668	.9985736	.9984798	.9983854	.9982905	.9981951	.9980992
18	.9987344	.9986318	.9985386	.9984448	.9983504	.9982555	.9981601	.9980642
19	.9986994	.9985968	.9985036	.9984098	.9983154	.9982205	.9981251	.9980292
20	.9986644	.9985618	.9984686	.9983748	.9982804	.9981855	.9980901	.9979942
21	.9986294	.9985268	.9984336	.9983398	.9982454	.9981505	.9980551	.9979592
22	.9985944	.9984918	.9983986	.9983048	.9982104	.9981155	.9980201	.9979242
23	.9985594	.9984568	.9983636	.9982698	.9981754	.9980805	.9979851	.9978892
24	.9985244	.9984218	.9983286	.9982348	.9981404	.9980455	.9979501	.9978542
25	.9984894	.9983868	.9982936	.9981998	.9981054	.9980105	.9979151	.9978192
26	.9984544	.9983518	.9982586	.9981648	.9980704	.9979755	.9978801	.9977842
27	.9984194	.9983168	.9982236	.9981298	.9980354	.9979405	.9978451	.9977492
28	.9983844	.9982818	.9981886	.9980948	.9979994	.9979045	.9978091	.9977132
29	.9983494	.9982468	.9981536	.9980598	.9979654	.9978705	.9977751	.9976792
30	.9983144	.9982118	.9981186	.9980248	.9979304	.9978355	.9977401	.9976442
31	.9982794	.9981768	.9980836	.9979898	.9978954	.9978005	.9977051	.9976092
32	.9982444	.9981418	.9980486	.9979548	.9978604	.9977655	.9976701	.9975742
33	.9982094	.9981068	.9980136	.9979198	.9978254	.9977305	.9976351	.9975392
34	.9981744	.9980718	.9979786	.9978848	.9977904	.9976955	.9976001	.9975042
35	.9981394	.9980368	.9979436	.9978498	.9977554	.9976605	.9975651	.9974692
36	.9981044	.9980018	.9979086	.9978148	.9977204	.9976255	.9975301	.9974342
37	.9980694	.9979668	.9978736	.9977798	.9976854	.9975905	.9974951	.9973992
38	.9980344	.9979318	.9978386	.9977448	.9976504	.9975555	.9974601	.9973642
39	.9980000	.9978974	.9978042	.9977104	.9976160	.9975211	.9974257	.9973298
40	.9979650	.9978624	.9977692	.9976754	.9975810	.9974861	.9973907	.9972948
41	.9979300	.9978274	.9977342	.9976404	.9975460	.9974511	.9973557	.9972598
42	.9978950	.9977924	.9976992	.9976054	.9975110	.9974161	.9973207	.9972248
43	.9978600	.9977574	.9976642	.9975704	.9974760	.9973811	.9972857	.9971898
44	.9978250	.9977224	.9976292	.9975354	.9974410	.9973461	.9972507	.9971548
45	.9977900	.9976874	.9975942	.9975004	.9974060	.9973111	.9972157	.9971198
46	.9977550	.9976524	.9975592	.9974654	.9973710	.9972761	.9971807	.9970848
47	.9977200	.9976174	.9975242	.9974304	.9973360	.9972411	.9971457	.9970498
48	.9976850	.9975824	.9974892	.9973954	.9973010	.9972061	.9971107	.9970148
49	.9976500	.9975474	.9974542	.9973604	.9972660	.9971711	.9970757	.9969798
50	.9976150	.9975124	.9974192	.9973254	.9972310	.9971361	.9970407	.9969448
51	.9975800	.9974774	.9973842	.9972904	.9971960	.9971011	.9970057	.9969098
52	.9975450	.9974424	.9973492	.9972554	.9971610	.9970661	.9969707	.9968748
53	.9975100	.9974074	.9973142	.9972204	.9971260	.9970311	.9969357	.9968398
54	.9974750	.9973724	.9972792	.9971854	.9970910	.9969961	.9969007	.9968048
55	.9974400	.9973374	.9972442	.9971504	.9970560	.9969611	.9968657	.9967698
56	.9974050	.9973024	.9972092	.9971154	.9970210	.9969261	.9968307	.9967348
57	.9973700	.9972674	.9971742	.9970804	.9969860	.9968911	.9967957	.9966998
58	.9973350	.9972324	.9971392	.9970454	.9969510	.9968561	.9967607	.9966648
59	.9973000	.9971974	.9971042	.9970104	.9969160	.9968211	.9967257	.9966298
60	.9972650	.9971624	.9970692	.9969754	.9968810	.9967861	.9966907	.9965948
61	.9972300	.9971274	.9970342	.9969404	.9968460	.9967511	.9966557	.9965598
62	.9971950	.9970924	.9969992	.9969054	.9968110	.9967161	.9966207	.9965248
63	.9971600	.9970574	.9969642	.9968704	.9967760	.9966811	.9965857	.9964898
64	.9971250	.9970224	.9969292	.9968354	.9967410	.9966461	.9965507	.9964548
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68	.9969850	.9968824	.9967892	.9966954	.9966010	.9965061	.9964107	.9963148
69	.9969500	.9968474	.9967542	.9966604	.9965660	.9964711	.9963757	.9962798
70	.9969150	.9968124	.9967192	.9966254	.9965310	.9964361	.9963407	.9962448
71	.9968800	.9967774	.9966842	.9965904	.9964960	.9964011	.9963057	.9962098
72	.9968450	.9967424	.9966492	.9965554	.9964610	.9963661	.9962707	.9961748
73	.9968100	.9967074	.9966142	.9965204	.9964260	.9963311	.9962357	.9961398
74	.9967750	.9966724	.9965792	.9964854	.9963910	.9962961	.9962007	.9961048
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76	.9967050	.9966024	.9965092	.9964154	.9963210	.9962261	.9961307	.9960348
77	.9966700	.9965674	.9964742	.9963804	.9962860	.9961911	.9960957	.9959998
78	.9966350	.9965324	.9964392	.9963454	.9962510	.9961561	.9960607	.9959648
79	.9966000	.9964974	.9964042	.9963104	.9962160	.9961211	.9960257	.9959298
80	.9965650	.9964624	.9963692	.9962754	.9961810	.9960861	.9959907	.9958948
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82	.9964950	.9963924	.9962992	.9962054	.9961110	.9960161	.9959207	.9958248
83	.9964600	.9963574	.9962642	.9961704	.9960760	.9959811	.9958857	.9957898
84	.9964250	.9963224	.9962292	.9961354	.9960410	.9959461	.9958507	.9957548
85	.9963900	.9962874	.9961942	.9961004	.9960060	.9959111	.9958157	.9957198
86	.9963550	.9962524	.9961592	.9960654	.9959710	.9958761	.9957807	.9956848
87	.9963200	.9962174	.9961242	.9960304	.9959360	.9958411	.9957457	.9956498
88	.9962850	.9961824	.9960892	.9959954	.9959010	.9958061	.9957107	.9956148
89	.9962500	.9961474	.9960542	.9959604	.9958660	.9957711	.9956757	.9955798
90	.9962150	.9961124	.9960192	.9959254	.9958310	.9957361	.9956407	.9955448
91	.9961800	.9960774	.9959842	.9958904	.9957960	.9957011	.9956057	.9955098
92	.9961450	.9960424	.9959492	.9958554	.9957610	.9956661	.9955707	.9954748
93	.9961100	.9960074	.9959142	.9958204	.9957260	.9956311	.9955357	.9954398
94	.9960750	.9959724	.9958792	.9957854	.9956910	.9955961	.9955007	.9954048
95	.9960400	.9959374	.9958442	.9957504	.9956560	.9955611	.9954657	.9953698
96	.9960050	.9959024	.9958092	.9957154	.9956210	.9955261	.9954307	.9953348
97	.9959700	.9958674	.9957742	.9956804	.9955860	.9954911	.9953957	.9952998
98	.9959350	.9958324	.9957392	.9956454	.9955510	.9954561	.9953607	.9952648
99	.9959000	.9957974	.9957042	.9956104	.9955160	.9954211	.9953257	.9952298
100	.9958650	.9957624	.9956692	.9955754	.9954810	.9953861	.9952907	.9951948
101	.9958300	.9957274	.9956342	.9955404	.9954460	.9953511	.9952557	.9951598
102	.9957950	.9956924	.9955992	.9955054	.9954110	.9953161	.9952207	.9951248
103	.9957600	.9956574	.9955642	.9954704	.9953760	.9952811	.9951857	.9950898
104	.9957250	.9956224	.9955292	.9954354	.9953410	.9952461	.9951507	.9950548
105	.9956900	.9955874	.9954942	.9954004	.9953060	.9952111	.9951157	.9950198
106	.9956550	.9955524	.9954592	.9953654	.9952710	.9951761	.9950807	.9949848
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108	.9955850	.9954824	.9953892	.9952954	.9952010	.9951061	.9950107	.9949148
109	.9955500	.9954474	.9953542	.9952604	.9951660	.9950711	.9949757	.9948798
110	.9955150	.9954124	.9953192	.9952254	.9951310	.9950361	.9949407	.9948448
111	.9954800	.9953774	.9952842	.9951904	.9950960	.9949961	.9949007	.9948048
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113	.9954100	.9953074	.9952142	.9951204	.9950260	.9949311	.9948357	.9947398
114	.9953750							

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X	.01	.02	.03	.04	.05	.06	.07	.08
1	.2694468	.4968626	.6449913	.7501110	.8251754	.8780036	.9151952	.9412800
2	.0454104	.1477462	.2716032	.3961315	.5123313	.6132454	.6984600	.7676750
3	.0047470	.0301675	.0811807	.1537442	.2406510	.3344044	.4266142	.5168047
4	.0003649	.0045964	.0183344	.0457053	.0881287	.1445457	.2122143	.2875463
5	.0000218	.0005488	.0032708	.0108176	.0259156	.0506474	.0860009	.1318468
6	.0000011	.0000532	.0004755	.0020959	.0062694	.0146731	.0289824	.0506118
7		.0000043	.0000576	.0003394	.0018717	.00635768	.0025527	.0164697
8		.0000003	.0000059	.0000467	.0002105	.0009437	.0020085	.0045945
9			.0000005	.0000055	.0000226	.0001131	.0004222	.0011090
10				.0000006	.0000042	.0000208	.0000773	.0002335
11				.0000001	.0000005	.0000028	.0000124	.0000471
12						.0000003	.0000016	.0000070
13							.0000002	.0000010
14								.0000001
X	.09	.10	.11	.12	.13	.14	.15	.16
1	.9595044	.9721872	.9809778	.9870458	.9918160	.9940715	.9960167	.9973362
2	.0233326	.0671154	.1010412	.1269854	.1448495	.1532457	.1521603	.1416052
3	.0011181	.0074066	.0138031	.0218494	.0306954	.0393105	.0466876	.0528672
4	.0000940	.0004105	.0008110	.0012861	.0018203	.0024070	.0030405	.0037133
5	.0000117	.0000517	.0001257	.0002564	.0004150	.0006006	.0008132	.0010539
6	.00003871	.00015296	.00030102	.00047598	.00068000	.00091816	.00119459	.00151257
7	.00004182	.00014443	.00027069	.00041884	.00059207	.00079531	.00103265	.00130811
8	.00002547	.00008620	.00016820	.00026446	.00038892	.00054559	.00073803	.00097008
9	.000025243	.00011111	.00021556	.00033522	.00047310	.00063235	.00081650	.00103084
10	.00006013	.00013647	.00028007	.00045284	.00066247	.00091304	.00120981	.00155896
11	.0001259	.0003197	.0007829	.0015010	.0023473	.0033413	.0045882	.0060937
12	.0000233	.0000661	.0001664	.0003783	.0007667	.0013523	.0022791	.0035811
13	.0000038	.0000121	.0000339	.0000846	.0001929	.0004062	.0007993	.0014808
14	.0000006	.0000020	.0000061	.0000149	.0000340	.0000790	.0001641	.0003467
15	.0000001	.0000003	.0000010	.0000030	.0000082	.0000203	.0000466	.0001099
16			.0000001	.0000005	.0000014	.0000038	.0000095	.0000219
17				.0000001	.0000002	.0000006	.0000017	.0000043
18						.0000001	.0000004	.0000010
19							.0000001	.0000001
X	.17	.18	.19	.20	.21	.22	.23	.24
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3	.0000940	.0000410	.0000195	.0000094	.0000044	.0000022	.0000011	.0000006
4	.0000098	.0000044	.0000020	.0000010	.0000005	.0000002	.0000001	.0000001
5	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001
6	.5305130	.5911065	.6479748	.7003512	.7477544	.7899615	.8269690	.8589488
7	.5544833	.6144562	.6746769	.7330601	.7890751	.8442917	.8994576	.9549157
8	.5702770	.6293487	.6870763	.7431691	.7974668	.8510104	.9040007	.9565365
9	.5858881	.6444468	.7013509	.7564922	.8107514	.8641032	.9165308	.9680281
10	.5916021	.6495656	.7058123	.7603360	.8139214	.8665670	.9182758	.9690459
11	.0213985	.0315756	.0449682	.0620271	.0831185	.1084914	.1382519	.1723461
12	.0079011	.0124239	.0187888	.0274400	.0398240	.0563767	.0774471	.0933601
13	.0026025	.0043647	.0070188	.0108670	.0162562	.0235677	.0332007	.0455527
14	.0007659	.0013712	.0023466	.0038554	.0061040	.0093437	.0138673	.0200036
15	.0002016	.0003856	.0007027	.0012260	.0020560	.0033258	.0052050	.0079017
16	.0000475	.0000971	.0001885	.0003495	.0006213	.0010627	.0017550	.0028061
17	.0000100	.0000219	.0000453	.0000893	.0001684	.0003047	.0005313	.0008592
18	.0000019	.0000044	.0000098	.0000205	.0000409	.0000783	.0001443	.0002563
19	.0000003	.0000008	.0000019	.0000040	.0000089	.0000180	.0000351	.0000656
20	.0000001	.0000001	.0000003	.0000008	.0000017	.0000037	.0000076	.0000151
21			.0000001	.0000003	.0000007	.0000015	.0000031	.0000063
22					.0000001	.0000003	.0000007	.0000015
23						.0000001	.0000001	.0000001
X	.25	.26	.27	.28	.29	.30	.31	.32
1	.9999435	.9999642	.9999775	.9999859	.9999912	.9999946	.9999967	.9999980
2	.0000565	.0000358	.0000225	.0000141	.0000088	.0000054	.0000033	.0000020
3	.0000098	.0000044	.0000020	.0000010	.0000005	.0000002	.0000001	.0000001
4	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001
5	.9999435	.9999642	.9999775	.9999859	.9999912	.9999946	.9999967	.9999980
6	.0000565	.0000358	.0000225	.0000141	.0000088	.0000054	.0000033	.0000020
7	.0000098	.0000044	.0000020	.0000010	.0000005	.0000002	.0000001	.0000001
8	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001
9	.9999435	.9999642	.9999775	.9999859	.9999912	.9999946	.9999967	.9999980
10	.0000565	.0000358	.0000225	.0000141	.0000088	.0000054	.0000033	.0000020
11	.0000098	.0000044	.0000020	.0000010	.0000005	.0000002	.0000001	.0000001
12	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001
13	.9999435	.9999642	.9999775	.9999859	.9999912	.9999946	.9999967	.9999980
14	.0000565	.0000358	.0000225	.0000141	.0000088	.0000054	.0000033	.0000020
15	.0000098	.0000044	.0000020	.0000010	.0000005	.0000002	.0000001	.0000001
16	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001
17	.9999435	.9999642	.9999775	.9999859	.9999912	.9999946	.9999967	.9999980
18	.0000565	.0000358	.0000225	.0000141	.0000088	.0000054	.0000033	.0000020
19	.0000098	.0000044	.0000020	.0000010	.0000005	.0000002	.0000001	.0000001
20	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001
21	.9999435	.9999642	.9999775	.9999859	.9999912	.9999946	.9999967	.9999980
22	.0000565	.0000358	.0000225	.0000141	.0000088	.0000054	.0000033	.0000020
23	.0000098	.0000044	.0000020	.0000010	.0000005	.0000002	.0000001	.0000001
24	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001
25	.9999435	.9999642	.9999775	.9999859	.9999912	.9999946	.9999967	.9999980
26	.0000565	.0000358	.0000225	.0000141	.0000088	.0000054	.0000033	.0000020

	.31	.34	.35	.36	.37	.38	.39	.40
1	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000
2	.9999998	.9999998	.9999998	.9999998	.9999998	.9999998	.9999998	.9999999
3	.9999997	.9999997	.9999997	.9999997	.9999997	.9999997	.9999997	.9999998
4	.9999996	.9999996	.9999996	.9999996	.9999996	.9999996	.9999996	.9999997
5	.9999994	.9999994	.9999994	.9999994	.9999994	.9999994	.9999994	.9999996
6	.9999991	.9999991	.9999991	.9999991	.9999991	.9999991	.9999991	.9999993
7	.9999987	.9999987	.9999987	.9999987	.9999987	.9999987	.9999987	.9999989
8	.9999982	.9999982	.9999982	.9999982	.9999982	.9999982	.9999982	.9999984
9	.9999976	.9999976	.9999976	.9999976	.9999976	.9999976	.9999976	.9999978
10	.9999969	.9999969	.9999969	.9999969	.9999969	.9999969	.9999969	.9999971
11	.9999961	.9999961	.9999961	.9999961	.9999961	.9999961	.9999961	.9999963
12	.9999952	.9999952	.9999952	.9999952	.9999952	.9999952	.9999952	.9999954
13	.9999943	.9999943	.9999943	.9999943	.9999943	.9999943	.9999943	.9999945
14	.9999933	.9999933	.9999933	.9999933	.9999933	.9999933	.9999933	.9999935
15	.9999922	.9999922	.9999922	.9999922	.9999922	.9999922	.9999922	.9999924
16	.9999910	.9999910	.9999910	.9999910	.9999910	.9999910	.9999910	.9999912
17	.9999897	.9999897	.9999897	.9999897	.9999897	.9999897	.9999897	.9999899
18	.9999883	.9999883	.9999883	.9999883	.9999883	.9999883	.9999883	.9999885
19	.9999868	.9999868	.9999868	.9999868	.9999868	.9999868	.9999868	.9999870
20	.9999852	.9999852	.9999852	.9999852	.9999852	.9999852	.9999852	.9999854
21	.9999835	.9999835	.9999835	.9999835	.9999835	.9999835	.9999835	.9999837
22	.9999817	.9999817	.9999817	.9999817	.9999817	.9999817	.9999817	.9999819
23	.9999798	.9999798	.9999798	.9999798	.9999798	.9999798	.9999798	.9999800
24	.9999778	.9999778	.9999778	.9999778	.9999778	.9999778	.9999778	.9999780
25	.9999757	.9999757	.9999757	.9999757	.9999757	.9999757	.9999757	.9999759
26	.9999735	.9999735	.9999735	.9999735	.9999735	.9999735	.9999735	.9999737
27	.9999712	.9999712	.9999712	.9999712	.9999712	.9999712	.9999712	.9999714
28	.9999688	.9999688	.9999688	.9999688	.9999688	.9999688	.9999688	.9999690
29	.9999663	.9999663	.9999663	.9999663	.9999663	.9999663	.9999663	.9999665
30	.9999637	.9999637	.9999637	.9999637	.9999637	.9999637	.9999637	.9999639
31	.9999610	.9999610	.9999610	.9999610	.9999610	.9999610	.9999610	.9999612
32	.9999582	.9999582	.9999582	.9999582	.9999582	.9999582	.9999582	.9999584
33	.9999553	.9999553	.9999553	.9999553	.9999553	.9999553	.9999553	.9999555
34	.9999523	.9999523	.9999523	.9999523	.9999523	.9999523	.9999523	.9999525
35	.9999492	.9999492	.9999492	.9999492	.9999492	.9999492	.9999492	.9999494
36	.9999460	.9999460	.9999460	.9999460	.9999460	.9999460	.9999460	.9999462
37	.9999427	.9999427	.9999427	.9999427	.9999427	.9999427	.9999427	.9999429
38	.9999393	.99						

[illegible]

	1	49	50
1	1	.00000000	1.00000000
2	1	.00000000	1.00000000
3		.99999999	1.00000000
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29		.99999999	.99999999
30		.99999999	.99999999
31		.99999999	.99999999

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$$f(x, y, z) = \sum_{i=1}^n \sum_{j=1}^m \sum_{k=1}^p f_{ijk} x_i y_j z_k$$

X	.01	.02	.03	.04	.05	.06	.07	.08
1	.2965523	.5069254	.6556416	.7603965	.8339166	.8853114	.9211116	.9459776
2	.0478587	.1547292	.2828825	.4109747	.5279735	.6291309	.7133509	.7815616
3	.0051537	.0325387	.0868957	.1634476	.2542350	.3511342	.4475015	.5385110
4	.0004087	.0051088	.0202198	.0500269	.0957548	.1559462	.2273022	.3060294
5	.0000253	.0006297	.0037227	.0122133	.0290263	.0562753	.0948073	.1443025
6	.0000013	.0000631	.0005593	.0024448	.0072517	.0160311	.0329030	.0571106
7	.0000001	.0000053	.0000701	.0000497	.0015216	.0048483	.0097644	.0192011
8		.0000004	.0000075	.0000084	.0002721	.0009117	.0034456	.0075442
9			.0000007	.0000072	.0000420	.0001700	.0005333	.0011878
10			.0000001	.0000008	.0000056	.0000276	.0001015	.0003075
11				.0000001	.0000007	.0000039	.0000170	.0000584
12					.0000001	.0000005	.0000028	.0000139
13						.0000001	.0000003	.0000015
14							.0000003	.0000004
15								.0000004
16								.0000004
17								.0000004
18								.0000004
19								.0000004
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95								.0000004
96								.0000004
97								.0000004
98								.0000004
99								.0000004
100								.0000004

$$E_{n+1} = \sum_{k=0}^n \frac{1}{k!} E_k^{(n)} - E_n^{(n)}$$

n = 75

	.33	.34	.35	.36	.37	.38	.39	.40
1	.9999992	.9999995	.9999997	.9999998	.9999999	.9999999	1.0000000	1.0000000
2	.9999981	.9999980	.9999984	.9999986	.9999988	.9999988	.9999993	.9999996
3	.9999967	.9999964	.9999971	.9999975	.9999978	.9999979	.9999981	.9999985
4	.9999952	.9999948	.9999956	.9999962	.9999965	.9999966	.9999969	.9999973
5	.9999937	.9999932	.9999940	.9999947	.9999950	.9999951	.9999954	.9999958
6	.9999922	.9999916	.9999924	.9999931	.9999934	.9999935	.9999938	.9999942
7	.9999907	.9999900	.9999908	.9999915	.9999918	.9999919	.9999922	.9999926
8	.9999892	.9999884	.9999892	.9999899	.9999902	.9999903	.9999906	.9999910
9	.9999877	.9999868	.9999876	.9999883	.9999886	.9999887	.9999890	.9999894
10	.9999862	.9999852	.9999860	.9999867	.9999870	.9999871	.9999874	.9999878
11	.9999847	.9999836	.9999844	.9999851	.9999854	.9999855	.9999858	.9999862
12	.9999832	.9999820	.9999828	.9999835	.9999838	.9999839	.9999842	.9999846
13	.9999817	.9999804	.9999812	.9999819	.9999822	.9999823	.9999826	.9999830
14	.9999802	.9999788	.9999796	.9999803	.9999806	.9999807	.9999810	.9999814
15	.9999787	.9999772	.9999780	.9999787	.9999790	.9999791	.9999794	.9999798
16	.9999772	.9999756	.9999764	.9999771	.9999774	.9999775	.9999778	.9999782
17	.9999757	.9999740	.9999748	.9999755	.9999758	.9999759	.9999762	.9999766
18	.9999742	.9999724	.9999732	.9999739	.9999742	.9999743	.9999746	.9999750
19	.9999727	.9999708	.9999716	.9999723	.9999726	.9999727	.9999730	.9999734
20	.9999712	.9999692	.9999700	.9999707	.9999710	.9999711	.9999714	.9999718
21	.9999697	.9999676	.9999684	.9999691	.9999694	.9999695	.9999698	.9999702
22	.9999682	.9999660	.9999668	.9999675	.9999678	.9999679	.9999682	.9999686
23	.9999667	.9999644	.9999652	.9999659	.9999662	.9999663	.9999666	.9999670
24	.9999652	.9999628	.9999636	.9999643	.9999646	.9999647	.9999650	.9999654
25	.9999637	.9999612	.9999620	.9999627	.9999630	.9999631	.9999634	.9999638
26	.9999622	.9999596	.9999604	.9999611	.9999614	.9999615	.9999618	.9999622
27	.9999607	.9999580	.9999588	.9999595	.9999598	.9999599	.9999602	.9999606
28	.9999592	.9999564	.9999572	.9999579	.9999582	.9999583	.9999586	.9999590
29	.9999577	.9999548	.9999556	.9999563	.9999566	.9999567	.9999570	.9999574
30	.9999562	.9999532	.9999540	.9999547	.9999550	.9999551	.9999554	.9999558
31	.9999547	.9999516	.9999524	.9999531	.9999534	.9999535	.9999538	.9999542
32	.9999532	.9999500	.9999508	.9999515	.9999518	.9999519	.9999522	.9999526
33	.9999517	.9999484	.9999492	.9999499	.9999502	.9999503	.9999506	.9999510
34	.9999502	.9999468	.9999476	.9999483	.9999486	.9999487	.9999490	.9999494
35	.9999487	.9999452	.9999460	.9999467	.9999470	.9999471	.9999474	.9999478
36	.9999472	.9999436	.9999444	.9999451	.9999454	.9999455	.9999458	.9999462
37	.9999457	.9999420	.9999428	.9999435	.9999438	.9999439	.9999442	.9999446
38	.9999442	.9999404	.9999412	.9999419	.9999422	.9999423	.9999426	.9999430
39	.9999427	.9999388	.9999396	.9999403	.9999406	.9999407	.9999410	.9999414
40	.9999412	.9999372	.9999380	.9999387	.9999390	.9999391	.9999394	.9999398
41	.9999397	.9999356	.9999364	.9999371	.9999374	.9999375	.9999378	.9999382
42	.9999382	.9999340	.9999348	.9999355	.9999358	.9999359	.9999362	.9999366
43	.9999367	.9999324	.9999332	.9999339	.9999342	.9999343	.9999346	.9999350
44	.9999352	.9999308	.9999316	.9999323	.9999326	.9999327	.9999330	.9999334
45	.9999337	.9999292	.9999299	.9999306	.9999309	.9999310	.9999313	.9999317
46	.9999322	.9999276	.9999284	.9999291	.9999294	.9999295	.9999298	.9999302
47	.9999307	.9999260	.9999268	.9999275	.9999278	.9999279	.9999282	.9999286
48	.9999292	.9999244	.9999252	.9999259	.9999262	.9999263	.9999266	.9999270
49	.9999277	.9999228	.9999236	.9999243	.9999246	.9999247	.9999250	.9999254
50	.9999262	.9999212	.9999220	.9999227	.9999230	.9999231	.9999234	.9999238
51	.9999247	.9999196	.9999204	.9999211	.9999214	.9999215	.9999218	.9999222
52	.9999232	.9999180	.9999188	.9999195	.9999198	.9999199	.9999202	.9999206
53	.9999217	.9999164	.9999172	.9999179	.9999182	.9999183	.9999186	.9999190
54	.9999202	.9999148	.9999156	.9999163	.9999166	.9999167	.9999170	.9999174
55	.9999187	.9999132	.9999140	.9999147	.9999150	.9999151	.9999154	.9999158
56	.9999172	.9999116	.9999124	.9999131	.9999134	.9999135	.9999138	.9999142
57	.9999157	.9999100	.9999108	.9999115	.9999118	.9999119	.9999122	.9999126
58	.9999142	.9999084	.9999092	.9999099	.9999102	.9999103	.9999106	.9999110
59	.9999127	.9999068	.9999076	.9999083	.9999086	.9999087	.9999090	.9999094
60	.9999112	.9999052	.9999060	.9999067	.9999070	.9999071	.9999074	.9999078
61	.9999097	.9999036	.9999044	.9999051	.9999054	.9999055	.9999058	.9999062
62	.9999082	.9999020	.9999028	.9999035	.9999038	.9999039	.9999042	.9999046
63	.9999067	.9999004	.9999012	.9999019	.9999022	.9999023	.9999026	.9999030
64	.9999052	.9998988	.9998996	.9999003	.9999006	.9999007	.9999010	.9999014
65	.9999037	.9998972	.9998980	.9998987	.9998990	.9998991	.9998994	.9998998
66	.9999022	.9998956	.9998964	.9998971	.9998974	.9998975	.9998978	.9998982
67	.9999007	.9998940	.9998948	.9998955	.9998958	.9998959	.9998962	.9998966
68	.9998992	.9998924	.9998932	.9998939	.9998942	.9998943	.9998946	.9998950
69	.9998977	.9998908	.9998916	.9998923	.9998926	.9998927	.9998930	.9998934
70	.9998962	.9998892	.9998900	.9998907	.9998910	.9998911	.9998914	.9998918
71	.9998947	.9998876	.9998884	.9998891	.9998894	.9998895	.9998898	.9998902
72	.9998932	.9998860	.9998868	.9998875	.9998878	.9998879	.9998882	.9998886
73	.9998917	.9998844	.9998852	.9998859	.9998862	.9998863	.9998866	.9998870
74	.9998902	.9998828	.9998836	.9998843	.9998846	.9998847	.9998850	.9998854
75	.9998887	.9998812	.9998820	.9998827	.9998830	.9998831	.9998834	.9998838
76	.9998872	.9998796	.9998804	.9998811	.9998814	.9998815	.9998818	.9998822
77	.9998857	.9998780	.9998788	.9998795	.9998798	.9998799	.9998802	.9998806
78	.9998842	.9998764	.9998772	.9998779	.9998782	.9998783	.9998786	.9998790
79	.9998827	.9998748	.9998756	.9998763	.9998766	.9998767	.9998770	.9998774
80	.9998812	.9998732	.9998740	.9998747	.9998750	.9998751	.9998754	.9998758
81	.9998797	.9998716	.9998724	.9998731	.9998734	.9998735	.9998738	.9998742
82	.9998782	.9998700	.9998708	.9998715	.9998718	.9998719	.9998722	.9998726
83	.9998767	.9998684	.9998692	.9998699	.9998702	.9998703	.9998706	.9998710
84	.9998752	.9998668	.9998676	.9998683	.9998686	.9998687	.9998690	.9998694
85	.9998737	.9998652	.9998660	.9998667	.9998670	.9998671	.9998674	.9998678
86	.9998722	.9998636	.9998644	.9998651	.9998654	.9998655	.9998658	.9998662
87	.9998707	.9998620	.9998628	.9998635	.9998638	.9998639	.9998642	.9998646
88	.9998692	.9998604	.9998612	.9998619	.9998622	.9998623	.9998626	.9998630
89	.9998677	.9998588	.9998596	.9998603	.9998606	.9998607	.9998610	.9998614
90	.9998662	.9998572	.9998580	.9998587	.9998590	.9998591	.9998594	.9998598
91	.9998647	.9998556	.9998564	.9998571	.9998574	.9998575	.9998578	.9998582
92	.9998632	.9998540	.9998548	.9998555	.9998558	.9998559	.9998562	.9998566
93	.9998617	.9998524	.9998532	.9998539	.9998542	.9998543	.9998546	.9998550
94	.9998602	.9998508	.9998516	.9998523	.9998526	.9998527	.9998530	.9998534
95	.9998587	.9998492	.9998500	.9998507	.9998510	.9998511	.9998514	.9998518
96	.9998572	.9998476	.9998484	.9998491	.9998494	.9998495	.9998498	.9998502
97	.9998557	.9998460	.9998468	.9998475	.9998478	.9998479	.9998482	.9998486
98	.9998542	.9998444	.9998452	.9998459	.9998462	.9998463	.9998466	.9998470
99	.9998527	.9998428	.9998436	.9998443	.9998446	.9998447	.9998450	.9998454
100	.9998512	.9998412	.9998420	.9998427	.9998430	.9998431	.9998434	.9998438
101	.9998497	.9998396	.9998404	.9998411	.9998414	.9998415	.9998418	.9998422
102	.9998482	.9998380	.9998388	.9998395	.9998398	.9998399	.9998402	.9998406
103	.9998467	.9998364	.9998372	.9998379	.9998382	.9998383	.9998386	.9998390
104	.9998452	.9998348	.9998356	.9998363	.9998366	.9998367	.9998370	.9998374
105	.9998437	.9998332	.9998340	.9998347	.9998350	.9998351	.9998354	.9998358
106	.9998422	.9998316	.9998324	.9998331	.9998334	.9998335	.9998338	.9998342
107	.9998407	.9998300	.9998308	.9998315	.9998318	.9998319	.9998322	.9998326
108	.9998392	.9998284	.9998292	.9998299	.9998302	.9998303	.9998306	.9998310
109	.9998377	.9998268	.9998276	.9998283	.9998286	.9998287	.9998290	.9998294
110	.9998362	.9998252	.9998260	.9998267	.9998270	.9998271	.9998274	.9998278
111	.9998347	.9998236	.9998244	.9998251	.9998254	.9998255	.9998258	.9998262
112	.9998332	.9998220	.9998228	.9998235	.9998238	.9998239	.9998242	.9998246
113	.9998317	.9998						

AMCP 706-109

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 35

	.49	.50
29	.0000363	.0000594
30	.0000067	.0000112
31	.0000010	.0000017
32	.0000001	.0000002

$$P(x, p, p) = \sum_{i=0}^n \binom{n}{i} p^i (1-p)^{n-i}$$

AMCP 706-109

n = 30

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.3035066	.5167869	.6659723	.7699806	.8422208	.8923040	.9266524	.9502994
2	.0503456	.1617731	.2940653	.4249516	.5432707	.645025	.7279039	.7947148
3	.0055888	.0349829	.0937753	.1733679	.2679219	.3678146	.4661116	.5579558
4	.0004569	.0086568	.0222201	.0545645	.1036708	.1678575	.2427906	.3244860
5	.0000291	.0007193	.0042176	.0137259	.0321627	.0620556	.1041154	.1572406
6	.0000015	.0000744	.0006542	.0020355	.0043404	.0091978	.0171288	.0240859
7	.0000001	.0000064	.0000048	.0000411	.0001001	.0002497	.0005339	.0008338
8		.0000005	.0000003	.0000025	.0000034	.0000113	.0000253	.0000368
9			.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
10			.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
11				.0000000	.0000000	.0000000	.0000000	.0000000
12					.0000000	.0000000	.0000000	.0000000
13						.0000000	.0000000	.0000000
14							.0000000	.0000000

x	.09	.10	.11	.12	.13	.14	.15	.16
1	.9664456	.9774716	.9849325	.9896803	.9933580	.9956153	.9971221	.9981804
2	.8470685	.8873580	.9178908	.9407215	.9575901	.9699106	.9780387	.9832321
3	.6404197	.7181371	.7728847	.8232010	.8640750	.8967131	.9222754	.9422709
4	.4087914	.4914886	.5627676	.6215783	.6697044	.7086317	.7394407	.7632893
5	.2197979	.2892274	.3626566	.4372527	.5104806	.5800611	.6450407	.7037925
6	.1001713	.1453973	.1988295	.2599323	.3277800	.3912774	.4523565	.5261324
7	.0390434	.0688281	.0942133	.1332974	.1726414	.2303860	.2900561	.3512923
8	.0131337	.0235095	.0387987	.0591744	.0873359	.1214297	.1680138	.2085657
9	.0038446	.0076728	.0139710	.0235011	.0371371	.0559000	.0810444	.1104163
10	.0009864	.0019884	.0044243	.0081025	.0140917	.0230844	.0351345	.0516167
11	.0002332	.0005561	.0012385	.0025174	.0047162	.0082766	.0137077	.0215827
12	.0000447	.0001248	.0003078	.0006568	.0014043	.0026712	.0047703	.0080608
13	.0000000	.0000049	.0000602	.0001671	.0003732	.0007708	.0014445	.0026950
14	.0000000	.0000004	.0000015	.0000034	.0000087	.0000199	.0000410	.0000801
15	.0000000	.0000000	.0000002	.0000007	.0000016	.0000041	.0000103	.0000217
16		.0000000	.0000000	.0000002	.0000006	.0000018	.0000043	.0000085
17			.0000000	.0000000	.0000001	.0000003	.0000009	.0000023
18				.0000000	.0000000	.0000000	.0000001	.0000004
19					.0000000	.0000000	.0000000	.0000001
20						.0000000	.0000000	.0000000

x	.17	.18	.19	.20	.21	.22	.23	.24
1	.9987787	.9992106	.9994923	.9996755	.9997937	.9998522	.9998980	.9999348
2	.9897737	.9927244	.9958081	.9980269	.9993337	.9998077	.9999366	.9999867
3	.9574267	.9690085	.9776137	.9839769	.9886337	.9920077	.9944209	.9961490
4	.8825785	.9091919	.9308440	.9477720	.9609611	.9711105	.9786307	.9846371
5	.7559687	.8014256	.8403360	.8731018	.9002740	.9224844	.9403921	.9546433
6	.5900100	.6497470	.7044633	.7536283	.7970291	.8347079	.8666097	.8940241
7	.4143889	.4777314	.5397921	.5991063	.6553308	.7067943	.7535049	.7951192
8	.2603265	.3158854	.3742507	.4339655	.4936084	.5521734	.6083299	.6612630
9	.1457890	.1871074	.2334895	.2841235	.3380249	.3940835	.4511354	.5080328
10	.0728337	.0991615	.1307666	.1675798	.2092906	.2553600	.3050561	.3574909
11	.0324995	.0470374	.0657087	.0889120	.1160952	.1477180	.1827439	.2213541
12	.0137730	.0199930	.0286365	.0402277	.0550840	.0729286	.0936659	.1173381
13	.0046409	.0076251	.0120116	.0182168	.0266928	.0379053	.0523048	.0702968
14	.0014904	.0026130	.0043783	.0070425	.0109155	.0163351	.0237612	.0335494
15	.0004302	.0008055	.0014367	.0024530	.0040254	.0063709	.0097541	.0144863
16	.0001117	.0002235	.0004247	.0007702	.0013391	.0022402	.0036177	.0056556
17	.0000261	.0000559	.0001111	.0002101	.0004019	.0007111	.0011959	.0019559
18	.0000055	.0000136	.0000272	.0000557	.0001088	.0002037	.0003666	.0006363
19	.0000010	.0000026	.0000059	.0000128	.0000265	.0000526	.0001000	.0001831
20	.0000002	.0000005	.0000012	.0000027	.0000058	.0000122	.0000246	.0000475
21		.0000001	.0000003	.0000005	.0000012	.0000026	.0000054	.0000111
22			.0000000	.0000000	.0000002	.0000005	.0000011	.0000023
23				.0000000	.0000000	.0000000	.0000000	.0000004
24					.0000000	.0000000	.0000000	.0000001

x	.25	.26	.27	.28	.29	.30	.31	.32
1	.9999682	.9999804	.9999880	.9999927	.9999956	.9999973	.9999984	.9999991
2	.9999660	.9999724	.9999820	.9999903	.9999964	.9999993	.9999999	.9999999
3	.9997319	.9998207	.9998792	.9999136	.9999463	.9999696	.9999772	.9999852
4	.9989560	.9991367	.9994533	.9996237	.9997316	.9998152	.9998749	.9999150
5	.9458430	.9745388	.9812117	.9862740	.9900717	.9928097	.9944580	.9964600
6	.9165335	.9349674	.9498673	.9617591	.9711332	.9784360	.9840571	.9883144
7	.8316114	.8631327	.8899695	.9125034	.9311680	.9464315	.9587333	.9685779
8	.7102942	.7549646	.7950332	.8304078	.8613097	.8876477	.9100318	.9287329
9	.5637035	.6171965	.6677252	.7146773	.7576260	.7963228	.8306827	.8607619
10	.4116815	.4660031	.5212444	.5746576	.6259995	.6745564	.7197729	.7612490
11	.2748666	.3237439	.3749644	.4276370	.4808374	.5336552	.5850214	.6348089
12	.1670660	.2051032	.2470832	.2924960	.3406947	.3909241	.4423649	.4941697
13	.0923071	.1182594	.1485446	.1830003	.2214418	.2634856	.3086404	.3562882
14	.0461403	.0615389	.0812601	.1044019	.1311777	.1612652	.1943914	.2304997
15	.0209130	.0294138	.0403753	.0541778	.0711762	.0916633	.1158590	.1438901
16	.0035798	.0126583	.0181276	.0255351	.0350280	.0470382	.0619144	.0799713
17	.0011840	.0044315	.0074312	.0109243	.0156493	.0219372	.0301047	.0404921
18	.0000648	.0002736	.0004764	.0007341	.0010615	.0014812	.0019914	.0026031
19	.0000234	.0000531	.0000917	.0001492	.0002323	.0003559	.0005317	.0007778
20	.0000083	.0000158	.0000276	.0000476	.0000768	.0001231	.0001924	.0002937
21	.0000017	.0000041	.0000075	.0000132	.0000224	.0000385	.0000624	.0001002
22	.0000009	.0000020	.0000040	.0000078	.0000148	.0000272	.0000482	.0000846
23	.0000004	.0000009	.0000018	.0000036	.0000073	.0000144	.0000288	.0000576
24	.0000002	.0000004	.0000008	.0000016	.0000032	.0000064	.0000128	.0000256
25		.0000001	.0000002	.0000004	.0000008	.0000016	.0000032	.0000064
26				.0000000	.0000000	.0000000	.0000000	.0000000
27					.0000000	.0000000	.0000000	.0000000

[illegible]

.4196191	.4898884
.2926919	.3375859
.1070770	.0840060
.1106679	.1166030
.0058075	.0761923
.0291310	.0308283
.0120436	.0170037
.0052039	.0074772
.0010069	.0038317
.0006140	.0009572
.0001792	.0000306
.0000465	.0000706
.0000107	.0000100
.0000082	.0000040
.0000004	.0000007
.0000001	.0000001
.44	.45
.0000000	1.0000000
.0000000	1.0000000
.9990996	.9999998
.9999267	.9999980
.9999773	.9999983
.9998803	.9999240
.9994050	.9996611
.9901572	.9897365
.9943745	.9860059
.9051290	.9089047
.9655157	.9736765
.9800095	.9439504
.8694633	.8933000
.7020725	.0167450
.6713000	.7133000
.5426737	.5904175
.4099961	.4570876
.2813539	.3303202
.8636387	.3200338
.1079259	.1346107
.0593606	.0752008
.0290902	.0781693
.0128739	.0175101
.0051183	.0072313
.0018175	.0026615
.0005727	.0000700
.0001580	.0003509
.0000384	.0000631
.0000080	.0000137
.0000014	.0000025
.0000000	.0000004

[illegible][illegible]

λ	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	.99999998	.99999999
5	.99999983	.99999999
6	.99999841	.99999955
7	.99994337	.99996682
8	.99975644	.99984371
9	.99910411	.99940334
10	.99715435	.99803333
11	.99304970	.99433345
12	.98061166	.98158316
13	.94733173	.94777333
14	.91684484	.93375000
15	.8524794	.8785075
16	.7617794	.79743339
17	.64740444	.68114033
18	.51812388	.56630303
19	.3870992	.44666977
20	.2676680	.33088597
21	.1702060	.2325161
22	.0988613	.13114925
23	.0521247	.08662491
24	.0247920	.05362877
25	.0105674	.0244084
26	.0040074	.0036655
27	.0013408	.0019666

$$\sum_{i=1}^n \frac{1}{i^2} = \frac{\pi^2}{6}$$

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	.40	.50
00	.0003412	.0005266
29	.0000782	.0001563
30	.0000712	.0000348
31	.0000010	.0000065
32	.0000005	.0000010
33	.0000001	.0000001

AMCP 706-109

$$P(x, y, z) = \sum_{i,j,k} P_{ijk} x^i y^j z^k$$

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.3105509	.5264511	.6759932	.7791814	.8501097	.8986717	.9317867	.9542754
2	.0528780	.1688734	.3052225	.4387528	.5582182	.6593646	.7418163	.8071616
3	.0068284	.0375183	.0988140	.1834313	.2816894	.3844189	.4844371	.5768935
4	.0005074	.0062433	.0243368	.0593167	.1113910	.1726669	.2484210	.3332945
5	.0000334	.0008181	.0047577	.0153594	.0359285	.0685797	.1130227	.1706316
6	.0000018	.0000873	.0007611	.0032712	.0095416	.0217812	.0419889	.0715383
7	.0000001	.0000078	.0001019	.0008849	.0031747	.0085499	.0211525	.0458870
8		.0000006	.0000114	.0000892	.0004083	.0013465	.0035403	.0078045
9			.0000054	.0000117	.0000675	.0002685	.0008272	.0021136
10			.0000001	.0000013	.0000090	.0000468	.0001698	.0004967
11				.0000001	.0000012	.0000072	.0000305	.0001030
12					.0000001	.0000010	.0000049	.0000219
13						.0000001	.0000007	.0000031
14							.0000001	.0000004
15								.0000001
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AMCP 706-109

$$P(c, n, c) = \sum_{r=0}^n \binom{n}{r} \frac{c^r}{1-c} (1-c)^{n-r}$$

n = 17

	.49	.50
27	.0026474	.0038160
28	.0002569	.0012816
29	.0002455	.0003764
30	.0000593	.0000955
31	.0000123	.0000206
32	.0000021	.0000037
33	.0000003	.0000005
34		.0000001

$$F(r, n, p) = \sum_{i=0}^n \binom{n}{i} p^i (1-p)^{n-i}$$

AMCP 706-109
n = 38

	.01	.02	.03	.04	.05	.06	.07	.08
1	.3174544	.5359221	.6857114	.7880142	.8576043	.9047514	.9345616	.9579334
2	.0554544	.1760250	.3163456	.4523699	.5728128	.6737230	.7551142	.8169307
3	.0064969	.0201454	.0500663	.1036441	.1936441	.3099128	.4345336	.5523177
4	.0005624	.0060698	.0265711	.0642812	.1203809	.1919519	.2742440	.3519824
5	.0000381	.0069266	.0053451	.0171177	.0397266	.0752449	.1259447	.1844446
6	.0000021	.0001019	.0000810	.0037547	.0108609	.0245891	.0470173	.0794658
7	.0000001	.0000094	.0001217	.0006923	.0025050	.0068057	.0151710	.0292585
8		.0000007	.0000143	.0001090	.0004946	.0016167	.0042132	.0093003
9			.0000015	.00000148	.0000846	.0003332	.0010171	.0025751
10			.0000001	.00000015	.0000126	.0000601	.0002152	.0006260
11				.0000002	.0000017	.0000096	.0000402	.0001345
12					.0000002	.0000013	.0000067	.0000287
13						.0000002	.0000010	.0000044
14							.0000001	.0000007
15								.0000001
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	.33	.34	.35	.36	.37	.38	.39	.40
1	.9997991	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	.9999591	.9999971	.9999983	.9999990	.9999994	.9999997	.9999998	.9999999
3	.9999533	.9999712	.9999825	.9999894	.9999937	.9999963	.9999978	.9999987
4	.9997053	.9998110	.9998081	.9998247	.9998538	.9998712	.9998825	.9998957
5	.9986364	.9980970	.9979376	.9976059	.9972450	.9968367	.9963967	.9959333
6	.9950584	.9926557	.9976310	.9903666	.9890134	.9892763	.9995235	.9999639
7	.9053647	.9893934	.9923992	.9946145	.9962273	.9973873	.9982115	.9987499
8	.9635301	.9778516	.9745208	.9689146	.9690156	.9720943	.9743766	.9760472
9	.9218804	.9388278	.9326498	.9637720	.9726032	.9795236	.9840760	.9876260
10	.8534871	.8809770	.9044197	.9241295	.9404733	.9536880	.9646880	.9732169
11	.7557971	.7945516	.8291065	.8594628	.8857504	.9081938	.9270885	.9427764
12	.6333197	.6812258	.7258801	.7660718	.8039424	.8369778	.8659945	.8911198
13	.4973197	.5458866	.5888172	.6268733	.6598390	.6878094	.7108194	.7293350
14	.2628801	.2900320	.3166312	.3425142	.3678305	.3925853	.4167317	.4403300
15	.1536145	.1874146	.2250595	.2662505	.3105544	.3574174	.4061869	.4561386
16	.0879995	.1114234	.1369816	.1639123	.2049082	.2435790	.2855653	.3304136
17	.0461768	.0607662	.0755196	.0907319	.1246131	.1532855	.1879480	.2284450
18	.0214334	.0303149	.0407748	.0536961	.0695961	.0887314	.1113435	.1375005
20	.0096938	.0138043	.0192870	.0264374	.0355839	.0470669	.0612249	.0783774
21	.0038537	.0057240	.0083258	.0118713	.0166043	.0228133	.0310792	.0408620
22	.0015123	.0021561	.0032668	.0048493	.0069293	.0095400	.0128100	.0167740
23	.0004566	.0007319	.0011619	.0017957	.0027191	.0040372	.0058827	.0083786
24	.0001346	.0002268	.0003734	.0006013	.0009479	.0014643	.0022167	.0032957
25	.0000358	.0000629	.0001080	.0001813	.0002977	.0004707	.0007546	.0011668
26	.0000088	.0000156	.0000280	.0000490	.0000839	.0001405	.0002304	.0003705
27	.0000019	.0000035	.0000065	.0000118	.0000211	.0000368	.0000628	.0001015
28	.0000003	.0000007	.0000013	.0000025	.0000047	.0000085	.0000152	.0000265
29	.0000000	.0000001	.0000002	.0000005	.0000009	.0000017	.0000032	.0000059
30				.0000001	.0000002	.0000003		.0000011

№	.41	.42	.43	.44	.45	.46	.47	.48
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	.99999997	.99999996	.99999998	.99999999	.99999999	1.00000000	1.00000000	1.00000000
4	.99999993	.99999993	.99999997	.99999998	.99999993	.99999996	.99999998	.99999999
5	.99999900	.99999755	.99999852	.99999912	.99999948	.99999970	.99999983	.99999999
6	.99999605	.99989732	.99989204	.99989506	.99989698	.99989817	.99989891	.99989936
7	.99994919	.99984653	.99984613	.99984771	.99984702	.99984758	.99984838	.99984878
8	.99972577	.99971264	.99971235	.99971457	.99971356	.99971319	.99971371	.99971496
9	.99930407	.99943305	.99960112	.99972280	.99980992	.99987131	.99991403	.99994334
10	.99999631	.99851920	.99601909	.99220803	.99445456	.99611042	.99729291	.99881526
11	.95562316	.9660012	.97432609	.98076088	.9858070	.9896592	.9925641	.9947239
12	.9125701	.9330625	.9556179	.9758027	.9877971	.9935843	.99818758	.9999958
13	.8125373	.8253926	.8399984	.8579944	.8746990	.8884990	.9000000	.9100000
14	.7516045	.7895219	.8236084	.8538034	.8803393	.9032649	.9227261	.9390461
15	.6355954	.6681854	.7247619	.7647057	.8011234	.8338478	.8628301	.8881290
16	.5065090	.5565280	.6054524	.6525965	.6973572	.7392149	.7770457	.8119283
17	.3773593	.4263496	.4760697	.52599732	.5753147	.6233779	.6695106	.7131427
18	.2615946	.3044569	.3497579	.3973217	.4460918	.4956875	.546038	.5939419
19	.175780	.2012941	.2305888	.2719195	.3227433	.3607255	.4165583	.4655073
20	.0988059	.1227344	.1503105	.1815878	.2165101	.2549074	.2964870	.3400397
21	.0534046	.0606908	.0870443	.1087246	.1339380	.1627990	.1953343	.2314592
22	.0263617	.0351465	.0461354	.0599557	.0760302	.0955453	.1184473	.1449316
23	.0118460	.0163764	.0222882	.0298651	.0394198	.0512756	.0657606	.0833866
24	.0040202	.0060733	.0086713	.0120512	.0163512	.0216812	.0280512	.0354112
25	.0017713	.0026416	.0038720	.0055842	.0079255	.0110745	.0152439	.0206706
26	.0005848	.0009062	.0013800	.0020641	.0030432	.0044117	.0062979	.0085722
27	.0001725	.0002779	.0004398	.0006039	.0010458	.0015738	.0023318	.0034012
28	.0000452	.0000757	.0001245	.0000212	.00003196	.00004994	.00007680	.00011628
29	.0000104	.0000082	.00000311	.00000522	.00000862	.00001391	.00002233	.00003511
30	.00000021	.00000030	.00000068	.00000118	.00000203	.00000342	.00000560	.00000927
31	.00000004	.00000007	.00000013	.00000023	.00000041	.00000072	.00000125	.00000212
32	.00000001	.00000001	.00000002	.00000004	.00000007	.00000013	.00000023	.00000041
33	.00000000	.00000000	.00000000	.00000001	.00000001	.00000002	.00000004	.00000007

	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	.99999999	1.00000000
5	.99999995	.99999999
6	.99999963	.99999979
7	.99997975	.99998179
8	.99990599	.99994194
9	.99963117	.99976400
10	.99875337	.99917110
11	.99631072	.99745113
12	.99032400	.99367135
13	.97738077	.98322138
14	.95253566	.96352435
15	.90989938	.92834626
16	.84434244	.87820685
17	.75380076	.79115339
18	.64123966	.68644487
19	.51506064	.56429237
20	.38744888	.44507037
21	.27070720	.33445111
22	.17504999	.20880461
23	.10303560	.13793775
24	.05623669	.07165573
25	.02823253	.03632543

AMCP 706-109

n = 30

$$P(o, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

%	.49	.50
26	.0122765	.0127762
27	.0042859	.0069265
28	.0017342	.0025468
29	.0005435	.0008290
30	.0001400	.0002360
31	.0000353	.0000581
32	.0000071	.0000122
33	.0000012	.0000021
34	.0000002	.0000003

AMCP 706-109

$$P(x; n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 30

	.01	.02	.03	.04	.05	.06	.07	.08
1	.3842710	.5452037	.6591142	.7364936	.8647240	.9104663	.9410083	.9618987
2	.0580747	.1832229	.3212266	.4657957	.6170514	.7678847	.9178156	.9690309
3	.0069865	.0428630	.1113465	.2403932	.3957807	.5678144	.7500189	.9300677
4	.0006280	.0075344	.0289241	.0674558	.1351376	.2444893	.4000187	.6000492
5	.0000434	.0010454	.0059818	.0150042	.0437593	.0882473	.1344657	.1906476
6	.0000023	.0001184	.0010149	.0048893	.0123042	.0276385	.0524022	.0878641
7	.0000001	.0000112	.0001445	.0008140	.0029228	.0076727	.0174003	.0338751
8		.0000009	.0000175	.0001324	.0005951	.0017280	.0049802	.0108970
9		.0000001	.0000018	.0000186	.0001051	.0004102	.0013408	.0031133
10			.0000002	.0000023	.0000162	.0000765	.0002714	.0007820
11				.0000002	.0000022	.0000126	.0000525	.0001738
12					.0000003	.0000018	.0000090	.0000344
13						.0000002	.0000008	.0000061
14							.0000002	.0000010
15								.0000001

	.09	.10	.11	.12	.13	.14	.15	.16
1	.9747895	.9835768	.9893779	.9931637	.9956223	.9972111	.9983326	.9990860
2	.0178574	.0214096	.0261770	.0320067	.0390105	.0475045	.0568686	.0661604
3	.0040257	.0074217	.0117412	.0172418	.0240707	.0324378	.0422836	.0533608
4	.0016786	.0036886	.0063464	.0101850	.0159990	.0241797	.0350161	.0489302
5	.0006129	.0013936	.0027863	.0050757	.0084609	.0135678	.0215325	.0329689
6	.0001366	.0002592	.0004408	.0007669	.0012599	.0020970	.0033763	.0051713
7	.0000774	.0001339	.0002448	.0004359	.0007483	.0012483	.0021338	.0035389
8	.0000297	.0000506	.0000840	.0001448	.0002492	.0004283	.0007230	.0011920
9	.0000112	.0000193	.0000319	.0000531	.0000885	.0001499	.0002555	.0004345
10	.0000021	.0000032	.0000050	.0000082	.0000134	.0000225	.0000381	.0000628
11	.0000003	.0000005	.0000008	.0000012	.0000020	.0000033	.0000054	.0000089
12	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001
13								
14								
15								
16								
17								
18								
19								
20								
21								

	.17	.18	.19	.20	.21	.22	.23	.24
1	.9993017	.9995647	.9997323	.9998338	.9998983	.9999381	.9999626	.9999775
2	.0006983	.0004353	.0002677	.0001662	.0001017	.0000619	.0000374	.0000225
3	.0000747	.0000253	.0000080	.0000027	.0000009	.0000003	.0000001	.0000000
4	.0000015	.0000005	.0000002	.0000001	.0000000	.0000000	.0000000	.0000000
5	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
6	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
7	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
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9	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
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17	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
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19	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
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21	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
22	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
23	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
24	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
25	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000

	.25	.26	.27	.28	.29	.30	.31	.32
1	.9999866	.9999921	.9999953	.9999973	.9999984	.9999991	.9999995	.9999997
2	.0000134	.0000079	.0000047	.0000027	.0000016	.0000009	.0000005	.0000003
3	.0000003	.0000001	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
4	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
5	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
6	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
7	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
8	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
9	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
10	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
11	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
12	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
13	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
14	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
15	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
16	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
17	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
18	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
19	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
20	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
21	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
22	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
23	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
24	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
25	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000

$$P(c, n, r) = \sum_{i=0}^n \binom{n}{i} p^i (1-p)^{n-i}$$

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[illegible][illegible]

	.41	.42	.43	.44	.45	.46	.47	.48
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	.99999996	.99999998	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
4	.99999992	.99999997	.99999998	.99999993	.99999996	.99999998	.99999999	.99999999
5	.99999973	.99999984	.99999994	.99999995	.99999998	.99999998	.99999999	.99999999
6	.99999859	.99999962	.99999983	.99999985	.99999990	.99999987	.99999993	.99999992
7	.99999409	.99999688	.99999790	.99999852	.99999970	.99999943	.99999954	.99999958
8	.99998886	.99999381	.99999325	.99999228	.99999625	.99999759	.99999898	.99999955
9	.99994785	.99999206	.99999775	.99999723	.99999706	.99999358	.99999330	.99999332
10	.99981349	.99999391	.99999236	.99999473	.99999697	.99999303	.99999743	.99999737
11	.99956028	.99940613	.99906059	.99858022	.99869894	.99826239	.99947895	.99963697
12	.99930220	.99945404	.99799182	.99759565	.99759815	.99821128	.99888991	.99905142
13	.99893853	.99919994	.99770970	.99732395	.99795620	.99612203	.99705730	.99796678
14	.99857015	.99865797	.99716372	.99688476	.99680512	.99422561	.99405032	.99399135
15	.99813160	.99809188	.99672649	.99639419	.99639931	.98659796	.98909804	.99135960
16	.99759434	.99699051	.99627555	.99599245	.99405020	.99027560	.99177880	.99402044
17	.99694207	.99610245	.99517034	.99460874	.99303335	.99666731	.99204281	.99103090
18	.99619101	.99559938	.99408720	.99378723	.99244108	.99544089	.99063617	.99015633
19	.99526128	.99485805	.99363915	.99311293	.99178001	.99271148	.99477013	.99271894
20	.99410604	.99357295	.99262702	.99245367	.99131151	.99072637	.99580196	.99007111
21	.99280191	.99138991	.99124288	.99079053	.99109954	.99051689	.99438761	.99239618
22	.99144493	.99022151	.99037262	.99012478	.99028801	.99048820	.99454569	.99186459
23	.99017740	.99022598	.99025428	.99029736	.99089941	.99071639	.99095233	.99128619
24	.99076904	.99098983	.99051547	.99074641	.99079503	.99171093	.99485143	.99025749
25	.99030223	.99044389	.99058410	.99091031	.99127206	.99174994	.99237106	.99314556
26	.99010732	.99016359	.99024519	.99036141	.99052402	.99074766	.99105025	.99145333
27	.99003415	.99005418	.99008441	.99012921	.99019447	.99028792	.99041956	.99060201
28	.99000974	.99001606	.99002601	.99004136	.99006464	.99009936	.99015028	.99022372
29	.99000247	.99000423	.99000713	.99001178	.99001912	.99003052	.99004793	.99007407
30	.99000055	.99000098	.99000172	.99000296	.99000449	.99000628	.99001351	.99002167
31	.99000011	.99000020	.99000036	.99000065	.99000114	.99000197	.99000333	.99000553
32	.99000002	.99000004	.99000007	.99000012	.99000022	.99000040	.99000071	.99000123
33	.99000000	.99000001	.99000001	.99000002	.99000004	.99000007	.99000013	.99000023
34	.99000000	.99000000	.99000000	.99000000	.99000001	.99000001	.99000003	.99000005

N	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	.9999997	.9999998
6	.9999978	.9999988
7	.9999877	.9999929
8	.9998420	.9998649
9	.9997660	.9998530
10	.9991810	.9994675
11	.9975060	.9983111
12	.9958557	.9958623
13	.9837275	.9801406
14	.9647141	.9733740

AMCP 706-109

$$f(n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 39

\sqrt{p}	.49	.50
15	.9307883	.9450355
16	.8764626	.9002046
17	.7981697	.8316088
18	.6963979	.7388013
19	.5768888	.6251707
20	.4469785	.5000000
21	.3080456	.3746293
22	.1820517	.2611907
23	.1073003	.1603918
24	.0795600	.0997954
25	.0416600	.0540645
26	.0198119	.0266860
27	.0095088	.0118514
28	.0038000	.0047377
29	.0011270	.0016889
30	.0003403	.0005325
31	.0000910	.0001470
32	.0000209	.0000321
33	.0000041	.0000071
34	.0000007	.0000012
35	.0000001	.0000002

$$P(x, y) = \sum_{n=0}^{\infty} \frac{(-1)^n}{n!} x^n y^n$$

	.01	.02	.03	.04	.05	.06	.07	.08
1	.3310288	.15543996	.7049477	.4046338	.8714678	.9150384	.9451382	.9643948
2	.0667366	.1904685	.3384501	.4790036	.6009359	.7009576	.7729386	.8245543
3	.0074074	.0456709	.1170089	.2144653	.3338640	.4734996	.6247779	.7865543
4	.0006856	.0082409	.0311968	.0748373	.1301478	.2072570	.3063150	.4369378
5	.0000498	.0011752	.0066701	.0210293	.0488853	.0865816	.1443684	.2112078
6	.0000009	.0001370	.0011640	.0048718	.0138359	.0304051	.0581467	.0967280
7	.0000001	.0000134	.0001206	.0009530	.0033919	.0092051	.0198504	.0376427
8		.0000011	.0000014	.0001597	.0007115	.0028847	.0075496	.0168679
9		.0000001	.0000003	.0000093	.0004196	.0015913	.0045796	.0097360
10			.0000005	.0000008	.0000207	.0000866	.0003199	.0008664
11				.0000003	.0000009	.0000164	.0000649	.0002394
12					.0000004	.0000008	.0000171	.0000645
13						.0000001	.0000010	.0000055
14							.0000001	.0000014
15								.0000008
16								
17								
18								
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№	40	50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	.99999999	.99999999
6	.99999997	.99999997
7	.99999997	.99999998
8	.99999996	.99999998
9	.99999995	.99999999
10	.99999993	.99999999
11	.99999991	.99999999
12	.99999989	.99999997
13	.99999986	.99999995
14	.99999982	.99999993
15	.99999978	.99999988
16	.99999972	.99999980

$$P(o; n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 40

	.40	.50
17	.8183132	.8659064
18	.7242661	.7852047
19	.6154480	.6820860
20	.5121643	.5826853
21	.4177027	.4971147
22	.3319887	.4170140
23	.2541578	.3447953
24	.1841514	.280916
25	.1220310	.2269100
26	.0701175	.0401452
27	.0340473	.0192187
28	.0098421	.0082945
29	.0021820	.0012133
30	.0007268	.0011107
31	.0002142	.0001388
32	.0000551	.0000911
33	.0000124	.0000211
34	.0000024	.0000042
35	.0000004	.0000007
36		.0000001

$$F(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 41

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.3377100	.5632136	.7131591	.8124405	.8779135	.9208881	.9499729	.9672432
2	.0634395	.1977393	.3494330	.4920480	.6144635	.7133505	.7915022	.8504503
3	.0080290	.0481661	.1244477	.2250476	.3371478	.4495471	.5544495	.6473540
4	.0007517	.0094995	.0139890	.0204224	.0274055	.0332116	.0374947	.0405778
5	.0000555	.0013165	.0074119	.0231749	.0525343	.0972424	.1566345	.2280914
6	.0000033	.0001577	.0013291	.0055236	.0155845	.0344262	.0642522	.1060453
7	.0000002	.0000158	.0000204	.0011100	.0039162	.0103689	.0225311	.0423690
8		.0000014	.0000258	.0001814	.0008455	.0026911	.0068297	.0136836
9		.0000001	.0000029	.0000286	.0001587	.0006083	.0018069	.0044571
10			.0000003	.0000038	.0000261	.0001208	.0004207	.0011899
11				.0000004	.0000038	.0000212	.0000868	.0002821
12					.0000005	.0000033	.0000160	.0000597
13					.0000001	.0000005	.0000026	.0000113
14						.0000001	.0000004	.0000019
15							.0000001	.0000003
16								
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41								

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 41

λ	.25	.26	.27	.28	.29	.30	.31	.32
24	.0000052	.0000108	.0000215	.0000413	.0000768	.0001386	.0002427	.0004135
25	.0000011	.0000025	.0000052	.0000106	.0000206	.0000390	.0000714	.0001272
26	.0000002	.0000005	.0000012	.0000025	.0000050	.0000100	.0000191	.0000355
27		.0000001	.0000002	.0000005	.0000011	.0000023	.0000044	.0000080
28				.0000001	.0000002	.0000005	.0000010	.0000021
29						.0000001	.0000002	.0000004
30								.0000001

λ	.33	.34	.35	.36	.37	.38	.39	.40
1	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	.9999984	.9999991	.9999995	.9999997	.9999999	.9999999	1.0000000	1.0000000
3	.9999837	.9999904	.9999944	.9999968	.9999982	.9999990	.9999994	.9999997
4	.9998855	.9999322	.9999589	.9999753	.9999854	.9999924	.9999950	.9999972
5	.9994486	.9996474	.9997771	.9998607	.9999139	.9999475	.9999683	.9999811
6	.9978418	.9985618	.9990528	.9993835	.9996035	.9997481	.9998419	.9999020
7	.9930932	.9952062	.9967127	.9977729	.9985066	.9990148	.9993568	.9995854
8	.9813988	.9865629	.9904123	.9932432	.9952972	.9967676	.9978062	.9985300
9	.9629184	.9676392	.9715242	.9748144	.9775962	.9799141	.9818411	.9835398
10	.9371001	.9318947	.9275277	.9240799	.9210124	.9183759	.9161710	.9143206
11	.8930310	.8729702	.8494778	.8198778	.7837562	.7419592	.6935081	.6393735
12	.7463123	.6742243	.5240453	.3561404	.1830510	.0739553	.0270983	.0033413
13	.6272183	.4772515	.238478	.7665290	.0049942	.0039119	.0020022	.0004514
14	.4963654	.2506427	.0634922	.0040738	.0016707	.0007517	.0003592	.0001900
15	.3674655	.1401973	.0473878	.0125616	.0032440	.0013101	.0005683	.0002508
16	.2531871	.0922308	.0282528	.0094681	.0023447	.0005552	.0001629	.0000478
17	.1617217	.0579819	.0183304	.0053827	.0013998	.0003094	.0000735	.0000180
18	.0954715	.0212721	.0052878	.0012829	.0002766	.0000604	.0000142	.0000035
19	.0519639	.0084226	.0017553	.0003426	.0000733	.0000166	.0000033	.0000008
20	.0260235	.0035721	.0006619	.0001229	.0000262	.0000052	.0000011	.0000002
21	.0119691	.00171059	.0002393	.0000435	.0000082	.0000017	.0000003	.0000000
22	.0050468	.0005142	.0000843	.0000146	.0000026	.0000005	.0000001	.0000000
23	.0019473	.0002222	.0000354	.0000053	.0000009	.0000002	.0000000	.0000000
24	.0006862	.0000806	.0000117	.0000014	.0000002	.0000000	.0000000	.0000000
25	.0002203	.0000370	.0000053	.0000008	.0000001	.0000000	.0000000	.0000000
26	.0000643	.0000113	.0000019	.0000003	.0000000	.0000000	.0000000	.0000000
27	.0000170	.0000033	.0000005	.0000001	.0000000	.0000000	.0000000	.0000000
28	.0000041	.0000007	.0000001	.0000000	.0000000	.0000000	.0000000	.0000000
29	.0000009	.0000001	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
30	.0000002	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
31		.0000001	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
32			.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
33				.0000000	.0000000	.0000000	.0000000	.0000000
34					.0000000	.0000000	.0000000	.0000000
35						.0000000	.0000000	.0000000
36							.0000000	.0000000

λ	.41	.42	.43	.44	.45	.46	.47	.48
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
4	.9999984	.9999991	.9999995	.9999997	.9999999	.9999999	.9999999	.9999999
5	.9999837	.9999904	.9999944	.9999968	.9999982	.9999990	.9999994	.9999997
6	.9994486	.9996474	.9997771	.9998607	.9999139	.9999475	.9999683	.9999811
7	.9978418	.9985618	.9990528	.9993835	.9996035	.9997481	.9998419	.9999020
8	.9930932	.9952062	.9967127	.9977729	.9985066	.9990148	.9993568	.9995854
9	.9813988	.9865629	.9904123	.9932432	.9952972	.9967676	.9978062	.9985300
10	.9629184	.9676392	.9715242	.9748144	.9775962	.9799141	.9818411	.9835398
11	.9371001	.9318947	.9275277	.9240799	.9210124	.9183759	.9161710	.9143206
12	.8930310	.8729702	.8494778	.8198778	.7837562	.7419592	.6935081	.6393735
13	.7463123	.6742243	.5240453	.3561404	.1830510	.0739553	.0270983	.0033413
14	.6272183	.4772515	.238478	.7665290	.0049942	.0039119	.0020022	.0004514
15	.4963654	.2506427	.0634922	.0040738	.0016707	.0007517	.0003592	.0001900
16	.3674655	.1401973	.0473878	.0125616	.0032440	.0013101	.0005683	.0002508
17	.2531871	.0922308	.0282528	.0094681	.0023447	.0005552	.0001629	.0000478
18	.1617217	.0579819	.0183304	.0053827	.0013998	.0003094	.0000735	.0000180
19	.0954715	.0212721	.0052878	.0012829	.0002766	.0000604	.0000142	.0000035
20	.0519639	.0084226	.0017553	.0003426	.0000733	.0000166	.0000033	.0000008
21	.0260235	.0035721	.0006619	.0001229	.0000262	.0000052	.0000011	.0000002
22	.0119691	.00171059	.0002393	.0000435	.0000082	.0000017	.0000003	.0000000
23	.0050468	.0005142	.0000843	.0000146	.0000026	.0000005	.0000001	.0000000
24	.0019473	.0002222	.0000354	.0000053	.0000009	.0000002	.0000000	.0000000
25	.0006862	.0000806	.0000117	.0000014	.0000002	.0000000	.0000000	.0000000
26	.0002203	.0000370	.0000053	.0000008	.0000001	.0000000	.0000000	.0000000
27	.0000643	.0000113	.0000019	.0000003	.0000000	.0000000	.0000000	.0000000
28	.0000170	.0000033	.0000005	.0000001	.0000000	.0000000	.0000000	.0000000
29	.0000041	.0000007	.0000001	.0000000	.0000000	.0000000	.0000000	.0000000
30	.0000009	.0000001	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
31	.0000002	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
32		.0000001	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
33			.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
34				.0000000	.0000000	.0000000	.0000000	.0000000
35					.0000000	.0000000	.0000000	.0000000
36						.0000000	.0000000	.0000000

λ	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	.9999999	.9999999
6	.9999984	.9999991
7	.9999837	.9999904
8	.9999448	.9999589
9	.9998855	.9999322
10	.9994486	.9996474

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$$P(u, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 41

λp	.49	.50
11	.9988872	.9992748
12	.9960033	.9978380
13	.9917979	.9942461
14	.9810698	.9862334
15	.9604551	.9702081
16	.9248038	.9413624
17	.8691422	.8844882
18	.7904970	.8255556
19	.6897489	.7336454
20	.5725733	.6221857
21	.4487348	.5000000
22	.3297527	.3776143
23	.2258289	.2663546
24	.1433455	.1744444
25	.0839090	.1055118
26	.0450771	.0586376
27	.0221177	.0297919
28	.0098626	.0137666
29	.0039754	.0057539
30	.0014398	.0021620
31	.0004654	.0007252
32	.0001331	.0002154
33	.0000334	.0000561
34	.0000073	.0000127
35	.0000013	.0000024
36	.0000002	.0000004
37		.0000001

$$P(r, n, p) = \sum_{i=0}^n \binom{n}{i} p^i (1-p)^{n-i}$$

n = 42

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.3441408	.5719493	.7217643	.8199506	.8840178	.9256348	.9525448	.9698638
2	.0661823	.2050188	.3603448	.5048640	.6276360	.7262727	.8025251	.8598011
3	.0085439	.0515495	.1311973	.2357274	.3510116	.4654053	.5710431	.6636023
4	.0008265	.0097810	.0367035	.0862074	.1568926	.2433905	.3387315	.4361255
5	.0000525	.0014700	.0082092	.0234648	.0572779	.1052217	.1682447	.2432648
6	.0000034	.0001809	.0015116	.0062296	.0174320	.0381952	.0707189	.1158089
7	.0000002	.0000187	.0002342	.0012873	.0044956	.0118124	.0254516	.0474631
8		.0000016	.0000311	.0002282	.0009991	.0031518	.0079288	.0160985
9		.0000001	.0000036	.0000351	.0001930	.0007332	.0021585	.0052766
10			.0000004	.0000047	.0000328	.0001501	.0005177	.0014509
11				.0000006	.0000049	.0000272	.0001101	.0003547
12				.0000001	.0000007	.0000044	.0000209	.0000775
13					.0000001	.0000006	.0000036	.0000152
14						.0000001	.0000005	.0000027
15							.0000001	.0000004
16								.0000001
17								
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$n = 42$

δ	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	.9999999	1.0000000
6	.9999996	.9999996
7	.9999974	.9999986

$$P(C, 0, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 42

λp	.49	.50
8	.00000000	.00000000
9	.00000000	.00000000
10	.00000000	.00000000
11	.00000000	.00000000
12	.00000000	.00000000
13	.00000000	.00000000
14	.00000000	.00000000
15	.00000000	.00000000
16	.00000000	.00000000
17	.00000000	.00000000
18	.00000000	.00000000
19	.00000000	.00000000
20	.00000000	.00000000
21	.00000000	.00000000
22	.00000000	.00000000
23	.00000000	.00000000
24	.00000000	.00000000
25	.00000000	.00000000
26	.00000000	.00000000
27	.00000000	.00000000
28	.00000000	.00000000
29	.00000000	.00000000
30	.00000000	.00000000
31	.00000000	.00000000
32	.00000000	.00000000
33	.00000000	.00000000
34	.00000000	.00000000
35	.00000000	.00000000
36	.00000000	.00000000
37	.00000000	.00000000

AMCP 706-109

X	.01	.02	.03	.04	.05	.06	.07	.08
1	.3508974	.5808103	.7301114	.8271525	.8838169	.9100967	.9558667	.9722737
2	.0689639	.0123860	.3711873	.5174675	.5404551	.7302344	.8130265	.8606061
3	.0091598	.0546195	.1380717	.2464931	.3640447	.4810574	.5872469	.6722302
4	.0002041	.0106164	.0395383	.0921882	.1665987	.2567114	.3549933	.4543237
5	.0000701	.0016362	.0090641	.0278945	.0622586	.1175110	.1801780	.2566936
6	.0000044	.0002067	.0017126	.0069920	.0194743	.0423168	.0775457	.1260054
7	.0000002	.0000219	.0003726	.0014850	.0051462	.0133953	.0286203	.0529307
8		.0000020	.0000372	.0008706	.0011741	.0036714	.0091554	.0193436
9		.0000002	.0000044	.0000420	.0002333	.0009784	.0025424	.0062009
10			.0000005	.0000060	.0000408	.0001850	.0006326	.0017564
11				.0000007	.0000063	.0000346	.0001387	.0004424
12				.0000001	.0000009	.0000058	.0000272	.0000997
13					.0000001	.0000009	.0000040	.0000802
14						.0000001	.0000008	.0000037
15							.0000001	.0000006
16								.0000001

X	.09	.10	.11	.12	.13	.14	.15	.16
1	.9826707	.9892247	.9933355	.9959003	.9974920	.9984744	.9990774	.9994454
2	.9089730	.9377429	.9579160	.9710610	.9813774	.9877954	.9920765	.9949026
3	.7555109	.8176107	.8659847	.9030211	.9308100	.9512001	.9661319	.9767316
4	.5490230	.6382070	.7107000	.7747207	.8275464	.8700663	.9035598	.9294294
5	.3444101	.4325291	.5107751	.5997845	.6732413	.7378440	.7931383	.8393890
6	.1865652	.2588741	.3337509	.4137075	.4934004	.5699542	.6411464	.7054677
7	.0876954	.1332651	.1809192	.2330046	.2832042	.3360577	.3871731	.4339233
8	.0360099	.0606694	.0943020	.1371733	.1887800	.2470143	.3120190	.3814003
9	.0130070	.0243715	.0416770	.0660950	.0981913	.1388045	.1869094	.2420434
10	.0041597	.0086872	.0163841	.0286020	.0458466	.0697209	.1006351	.1388161
11	.0011847	.0027620	.0057550	.0109261	.0191816	.0314978	.0488825	.0719641
12	.0003020	.0007870	.0018139	.0037769	.0072194	.0128264	.0213923	.0337630
13	.0000632	.0002019	.0005142	.0011772	.0024528	.0047210	.0084840	.0143592
14	.0000143	.0000467	.0001321	.0003319	.0007544	.0015745	.0030580	.0055458
15	.0000027	.0000098	.0000307	.0000808	.0002105	.0004769	.0009979	.0019465
16	.0000005	.0000019	.0000065	.0000197	.0000534	.0001314	.0002971	.0006230
17	.0000001	.0000003	.0000012	.0000042	.0000124	.0000330	.0000807	.0001822
18		.0000001	.0000002	.0000008	.0000026	.0000076	.0000200	.0000466
19				.0000001	.0000005	.0000016	.0000045	.0000119
20					.0000001	.0000003	.0000009	.0000026
21						.0000001	.0000002	.0000005
22							.0000001	.0000001

X	.17	.18	.19	.20	.21	.22	.23	.24
1	.9996686	.9998032	.9998839	.9999319	.9999604	.9999771	.9999868	.9999925
2	.9967498	.9979457	.9987120	.9992003	.9995075	.9996992	.9998179	.9998907
3	.9841957	.9891032	.9929441	.9953594	.9967791	.9975533	.9987580	.9992154
4	.9490541	.9636957	.9744509	.9823362	.9879230	.9917087	.9944312	.9963012
5	.8770775	.9073085	.9310718	.9492282	.9633773	.9738137	.9815071	.9870903
6	.7620803	.8107626	.8517041	.8854526	.9127516	.9344448	.9513957	.9644300
7	.6129256	.6765403	.7337257	.7841579	.8275210	.8641192	.8944316	.9190936
8	.4514396	.5208049	.5876060	.6503041	.7077667	.7592748	.8044939	.8434191
9	.3026002	.3669608	.4332946	.4997187	.5645162	.6262030	.6833605	.7358810
10	.1840466	.2356452	.2925305	.3533162	.4184303	.4880240	.5431754	.6038185
11	.1014877	.1376830	.1802667	.2288740	.2825066	.3402672	.4005587	.4620241
12	.0507587	.0730884	.1012663	.1355424	.1758577	.2218279	.2727594	.3276926
13	.0230513	.0351062	.0518504	.0733213	.1001989	.1327453	.1700625	.2145714
14	.0095186	.0155290	.0242094	.0362260	.0528399	.0720298	.0945318	.1293870
15	.0035791	.0062262	.0103158	.0163566	.0249215	.0366171	.0520429	.0717434
16	.0012271	.0022781	.0040150	.0067521	.0108819	.0168704	.0252411	.0365504
17	.0003841	.0007615	.0014286	.0025501	.0043509	.0071236	.0112311	.0171017
18	.0001099	.0002327	.0004651	.0008816	.0015935	.0027574	.0045846	.0073473
19	.0000287	.0000651	.0001386	.0002722	.0005348	.0009786	.0017169	.0028978
20	.0000069	.0000167	.0000378	.0000810	.0001645	.0003384	.0005898	.0010491
21	.0000015	.0000039	.0000094	.0000215	.0000464	.0000950	.0001859	.0003485
22	.0000003	.0000008	.0000022	.0000052	.0000120	.0000260	.0000537	.0001062
23	.0000001	.0000002	.0000005	.0000012	.0000028	.0000065	.0000142	.0000296
24			.0000001	.0000002	.0000006	.0000015	.0000034	.0000076
25					.0000001	.0000003	.0000008	.0000018
26						.0000001	.0000002	.0000004
27							.0000001	.0000001

X	.25	.26	.27	.28	.29	.30	.31	.32
1	.9999958	.9999976	.9999987	.9999993	.9999996	.9999999	.9999999	.9999999
2	.9999934	.9999961	.9999976	.9999987	.9999992	.9999995	.9999997	.9999998
3	.9999903	.9999961	.9999986	.9999996	.9999999	.9999999	.9999999	.9999999
4	.9999901	.9999961	.9999986	.9999996	.9999999	.9999999	.9999999	.9999999
5	.9999901	.9999961	.9999986	.9999996	.9999999	.9999999	.9999999	.9999999
6	.9742998	.9816633	.9870786	.9910060	.9938156	.9957923	.9971805	.9981305
7	.9388197	.9543426	.9663674	.9755410	.9824387	.9875493	.9912830	.9939732
8	.8763073	.9036043	.9258772	.9437542	.9578765	.9688614	.9772781	.9836325
9	.7825386	.8233028	.8684859	.9188126	.9727305	.9882066	.9948639	.9981734
10	.6609866	.7137709	.7615532	.8039969	.8410194	.8725220	.8994937	.9216596
11	.5032277	.5828292	.6396571	.6927596	.7414334	.7852525	.8239262	.8575398
12	.3854688	.4448095	.5044024	.5639827	.6194031	.6726891	.7220744	.7670178
13	.2630164	.3154937	.3710066	.4283992	.4864884	.5440768	.6000491	.6534816
14	.1656825	.2071481	.2533427	.3035932	.3570299	.4126380	.4693173	.5259471
15	.0961582	.1255751	.1600914	.1995881	.2437211	.2919287	.3435760	.3974013
16	.0513537	.0701643	.0934103	.1213918	.1542444	.1919127	.2341359	.2804490
17	.0252177	.0360942	.0502503	.0681748	.0902875	.1169005	.1481838	.1841370
18	.0113811	.0170820	.0248968	.0353055	.0487976	.0658410	.0868522	.1121522

$$P(x, n, t) = \sum_{j=0}^n \binom{n}{j} P^j (1-P)^{n-j}$$

n = 43

	.25	.26	.27	.28	.29	.30	.31	.32
19	.00471189	.00743332	.01135518	.0168418	.0243192	.0342341	.0470508	.0632214
20	.0017970	.0029725	.0047599	.0073941	.0111637	.0164102	.0235322	.0329237
21	.0006282	.0010918	.0018342	.0028851	.00447156	.0072436	.0108372	.0158144
22	.0002815	.0004611	.0007491	.0011872	.0018511	.0028403	.0042984	.0062962
23	.0000593	.0001130	.0002105	.0003770	.0006589	.0010791	.0017211	.0026442
24	.0000160	.0000322	.0000627	.0001176	.0002135	.0003754	.0006407	.0010634
25	.0000039	.0000084	.0000171	.0000316	.0000639	.0001177	.0002100	.0003642
26	.0000009	.0000020	.0000042	.0000088	.0000175	.0000337	.0000630	.0001141
27	.0000002	.0000004	.0000010	.0000021	.0000044	.0000088	.0000172	.0000338
28	.0000000	.0000001	.0000002	.0000005	.0000010	.0000021	.0000043	.0000085
29				.0000001	.0000002	.0000005	.0000010	.0000020
30					.0000001	.0000002	.0000005	.0000010
31						.0000001	.0000002	.0000005

	.33	.34	.35	.36	.37	.38	.39	.40
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	.9999999	.9999998	.9999997	.9999996	.9999995	.9999994	.9999993	.9999992
3	.9999998	.9999996	.9999994	.9999992	.9999990	.9999988	.9999986	.9999984
4	.9999997	.9999994	.9999991	.9999988	.9999985	.9999982	.9999979	.9999976
5	.9999996	.9999992	.9999988	.9999984	.9999980	.9999976	.9999972	.9999968
6	.9999995	.9999990	.9999985	.9999980	.9999975	.9999970	.9999965	.9999960
7	.9999994	.9999988	.9999982	.9999976	.9999970	.9999964	.9999958	.9999952
8	.9999993	.9999986	.9999979	.9999972	.9999965	.9999958	.9999951	.9999944
9	.9999992	.9999984	.9999976	.9999968	.9999960	.9999952	.9999944	.9999936
10	.9999991	.9999982	.9999973	.9999964	.9999955	.9999946	.9999937	.9999928
11	.9999990	.9999980	.9999970	.9999960	.9999950	.9999940	.9999930	.9999920
12	.9999989	.9999978	.9999968	.9999957	.9999946	.9999935	.9999924	.9999913
13	.9999988	.9999976	.9999965	.9999954	.9999942	.9999931	.9999920	.9999909
14	.9999987	.9999974	.9999962	.9999950	.9999938	.9999926	.9999914	.9999902
15	.9999986	.9999972	.9999959	.9999946	.9999933	.9999920	.9999907	.9999894
16	.9999985	.9999970	.9999956	.9999942	.9999928	.9999914	.9999900	.9999886
17	.9999984	.9999968	.9999953	.9999938	.9999923	.9999908	.9999893	.9999878
18	.9999983	.9999966	.9999950	.9999934	.9999918	.9999902	.9999886	.9999870
19	.9999982	.9999964	.9999947	.9999930	.9999913	.9999896	.9999879	.9999862
20	.9999981	.9999962	.9999944	.9999926	.9999908	.9999890	.9999872	.9999854
21	.9999980	.9999960	.9999941	.9999922	.9999903	.9999884	.9999865	.9999846
22	.9999979	.9999958	.9999938	.9999918	.9999898	.9999878	.9999858	.9999838
23	.9999978	.9999956	.9999935	.9999914	.9999893	.9999872	.9999851	.9999830
24	.9999977	.9999954	.9999932	.9999910	.9999888	.9999866	.9999844	.9999822
25	.9999976	.9999952	.9999929	.9999906	.9999883	.9999860	.9999837	.9999814
26	.9999975	.9999950	.9999926	.9999902	.9999878	.9999854	.9999830	.9999806
27	.9999974	.9999948	.9999923	.9999898	.9999873	.9999848	.9999823	.9999798
28	.9999973	.9999946	.9999920	.9999894	.9999868	.9999842	.9999816	.9999790
29	.9999972	.9999944	.9999917	.9999890	.9999863	.9999836	.9999809	.9999782
30	.9999971	.9999942	.9999914	.9999886	.9999858	.9999830	.9999802	.9999774
31	.9999970	.9999940	.9999911	.9999882	.9999853	.9999824	.9999795	.9999766
32	.9999969	.9999938	.9999908	.9999878	.9999848	.9999818	.9999788	.9999758
33	.9999968	.9999936	.9999905	.9999874	.9999843	.9999812	.9999781	.9999750
34	.9999967	.9999934	.9999902	.9999870	.9999838	.9999806	.9999774	.9999742
35	.9999966	.9999932	.9999899	.9999866	.9999833	.9999800	.9999767	.9999734
36	.9999965	.9999930	.9999896	.9999862	.9999828	.9999794	.9999760	.9999726
37	.9999964	.9999928	.9999893	.9999858	.9999823	.9999788	.9999753	.9999718
38	.9999963	.9999926	.9999891	.9999855	.9999819	.9999783	.9999747	.9999711
39	.9999962	.9999924	.9999889	.9999852	.9999815	.9999778	.9999741	.9999704
40	.9999961	.9999922	.9999887	.9999849	.9999811	.9999773	.9999735	.9999697
41	.9999960	.9999920	.9999885	.9999846	.9999807	.9999768	.9999729	.9999690
42	.9999959	.9999918	.9999883	.9999843	.9999803	.9999763	.9999723	.9999683
43	.9999958	.9999916	.9999881	.9999841	.9999800	.9999760	.9999719	.9999678
44	.9999957	.9999914	.9999879	.9999838	.9999797	.9999756	.9999715	.9999674
45	.9999956	.9999912	.9999877	.9999835	.9999793	.9999751	.9999709	.9999667
46	.9999955	.9999910	.9999875	.9999832	.9999789	.9999746	.9999703	.9999660
47	.9999954	.9999908	.9999873	.9999829	.9999786	.9999742	.9999698	.9999654
48	.9999953	.9999906	.9999871	.9999826	.9999782	.9999737	.9999692	.9999647
49	.9999952	.9999904	.9999869	.9999824	.9999779	.9999733	.9999687	.9999641
50	.9999951	.9999902	.9999867	.9999821	.9999776	.9999729	.9999682	.9999635
51	.9999950	.9999900	.9999865	.9999818	.9999773	.9999725	.9999678	.9999630
52	.9999949	.9999898	.9999863	.9999815	.9999770	.9999721	.9999673	.9999624
53	.9999948	.9999896	.9999861	.9999812	.9999767	.9999717	.9999668	.9999619
54	.9999947	.9999894	.9999859	.9999810	.9999764	.9999714	.9999664	.9999614
55	.9999946	.9999892	.9999857	.9999807	.9999761	.9999710	.9999660	.9999609
56	.9999945	.9999890	.9999855	.9999805	.9999758	.9999706	.9999655	.9999604
57	.9999944	.9999888	.9999853	.9999802	.9999755	.9999703	.9999651	.9999600
58	.9999943	.9999886	.9999851	.9999800	.9999752	.9999700	.9999647	.9999595
59	.9999942	.9999884	.9999849	.9999797	.9999749	.9999696	.9999643	.9999590
60	.9999941	.9999882	.9999847	.9999795	.9999746	.9999693	.9999639	.9999585
61	.9999940	.9999880	.9999845	.9999793	.9999743	.9999689	.9999635	.9999580
62	.9999939	.9999878	.9999843	.9999791	.9999740	.9999686	.9999631	.9999576
63	.9999938	.9999876	.9999841	.9999789	.9999737	.9999682	.9999627	.9999572
64	.9999937	.9999874	.9999839	.9999787	.9999735	.9999679	.9999623	.9999567
65	.9999936	.9999872	.9999837	.9999785	.9999732	.9999676	.9999620	.9999564
66	.9999935	.9999870	.9999835	.9999783	.9999730	.9999673	.9999616	.9999560
67	.9999934	.9999868	.9999833	.9999781	.9999727	.9999670	.9999613	.9999556
68	.9999933	.9999866	.9999831	.9999779	.9999725	.9999667	.9999610	.9999553
69	.9999932	.9999864	.9999829	.9999777	.9999722	.9999664	.9999606	.9999549
70	.9999931	.9999862	.9999827	.9999775	.9999720	.9999661	.9999603	.9999545
71	.9999930	.9999860	.9999825	.9999773	.9999718	.9999658	.9999600	.9999542
72	.9999929	.9999858	.9999823	.9999771	.9999715	.9999655	.9999596	.9999538
73	.9999928	.9999856	.9999821	.9999769	.9999712	.9999652	.9999593	.9999534
74	.9999927	.9999854	.9999819	.9999767	.9999710	.9999649	.9999589	.9999530
75	.9999926	.9999852	.9999817	.9999765	.9999707	.9999646	.9999586	.9999526
76	.9999925	.9999850	.9999815	.9999763	.9999704	.9999643	.9999582	.9999522
77	.9999924	.9999848	.9999813	.9999761	.9999701	.9999639	.9999578	.9999517
78	.9999923	.9999846	.9999811	.9999759	.9999698	.9999636	.9999575	.9999514
79	.9999922	.9999844	.9999809	.9999757	.9999695	.9999633	.9999571	.9999510
80	.9999921	.9999842	.9999807	.9999755	.9999692	.9999629	.9999567	.9999505
81	.9999920	.9999840	.9999805	.9999753	.9999689	.9999626	.9999564	.9999502
82	.9999919	.9999838	.9999803	.9999751	.9999686	.9999623	.9999560	.9999497
83	.9999918	.9999836	.9999801	.9999749	.9999683	.9999619	.9999556	.9999493
84	.9999917	.9999834	.9999799	.9999747	.9999680	.9999615	.9999551	.9999487
85	.9999916	.9999832	.9999797	.9999745	.9999677	.9999611	.9999547	.9999483
86	.9999915	.9999830	.9999795	.9999743	.9999674	.9999608	.9999543	.9999478
87	.9999914	.9999828	.9999793	.9999741	.9999671	.9999604	.9999539	.9999474
88	.9999913	.9999826	.9999791	.9999739	.9999668	.9999600	.9999535	.9999470
89	.9999912	.9999824	.9999789	.9999737	.9999665	.9999597	.9999531	.9999465
90	.9999911	.9999822	.9999787	.9999735	.9999662	.9999593	.9999527	.9999461
91	.9999910	.9999820	.9999785	.9999733	.9999659	.9999589	.9999522	.9999456
92	.9999909	.9999818	.9999783	.9999731	.9999656	.9999585	.9999518	.9999452
93	.9999908	.9999816	.9999781	.9999729	.9999653	.9999582	.9999514	.9999447
94	.9999907	.9999814	.9999779	.9999727	.9999650	.9999578	.9999510	.9999443
95	.9999906	.9999812	.9999777	.9999725	.9999647	.9999575	.9999506	.9999439
96	.9999905	.9999810	.9999775	.9999723	.9999644	.9999572	.9999503	.9999436
97	.9999904	.9999808	.9999773	.9999721	.9999641	.9999569	.9999500	.9999432
98	.9999903	.9999806	.9999771	.9999719	.9999638	.9999565	.9999495	.9999428
99	.9999902							

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$$P(c,n,p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 43

x	.49	.50
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	.99999999	.99999999
7	.99999998	.99999998
8	.99999996	.99999996
9	.99999992	.99999992
10	.99999984	.99999984
11	.99999968	.99999968
12	.99999936	.99999936
13	.99999872	.99999872
14	.99999776	.99999776
15	.99999648	.99999648
16	.99999488	.99999488
17	.99999296	.99999296
18	.99999072	.99999072
19	.99998816	.99998816
20	.99998528	.99998528
21	.99998208	.99998208
22	.99997856	.99997856
23	.99997472	.99997472
24	.99997056	.99997056
25	.99996608	.99996608
26	.99996128	.99996128
27	.99995616	.99995616
28	.99995072	.99995072
29	.99994504	.99994504
30	.99993912	.99993912
31	.99993296	.99993296
32	.99992656	.99992656
33	.99991992	.99991992
34	.99991304	.99991304
35	.99990592	.99990592
36	.99989856	.99989856
37	.99989096	.99989096
38	.99988312	.99988312

$$T(c, h, p) = \sum_{k=0}^{\infty} \binom{h}{k} p^k (1-p)^{h-k}$$

h = 44

	.01	.02	.03	.04	.05	.06	.07	.08
1	.3573884	.5889001	.7382080	.8340664	.8953260	.9342909	.9589560	.9744927
2	.0717832	.2197422	.3819581	.5298549	.6529212	.7497462	.8210553	.8760926
3	.0097579	.0577749	.1450653	.2857320	.3786052	.4964880	.6030515	.6944429
4	.0000866	.0114965	.0428243	.0903604	.1765110	.3011720	.3712511	.4723216
5	.0000785	.0018158	.0099781	.0304465	.0674756	.1221038	.1944158	.2743449
6	.0000051	.0002353	.0012351	.0078149	.0215560	.0464945	.0847101	.1366305
7	.0000003	.0000256	.0003158	.0017055	.0058601	.0151246	.0320451	.0587767
8		.0000024	.0000442	.0001391	.0003727	.0008548	.0105179	.0220306
9		.0000002	.0000054	.0000158	.0000404	.0001045	.0002383	.0004583
10			.0000006	.0000024	.0000054	.0000126	.0000272	.0000470
11			.0000001	.0000009	.0000020	.0000043	.0000122	.0000245
12				.0000001	.0000001	.0000005	.0000015	.0000031
13					.0000001	.0000001	.0000001	.0000002
14						.0000000	.0000000	.0000000
15							.0000000	.0000000
16								.0000001
17								
18								
19								
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97								
98								
99								
100								

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 44

	.40	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	.99999999	.99999999
7	.99999999	.99999999
8	.99999999	.99999999
9	.99999999	.99999999
10	.99999999	.99999999
11	.99999999	.99999999
12	.99999999	.99999999
13	.99999999	.99999999
14	.99999999	.99999999
15	.99999999	.99999999
16	.99999999	.99999999
17	.99999999	.99999999
18	.99999999	.99999999
19	.99999999	.99999999
20	.99999999	.99999999
21	.99999999	.99999999
22	.99999999	.99999999
23	.99999999	.99999999
24	.99999999	.99999999
25	.99999999	.99999999
26	.99999999	.99999999
27	.99999999	.99999999
28	.99999999	.99999999
29	.99999999	.99999999
30	.99999999	.99999999
31	.99999999	.99999999
32	.99999999	.99999999
33	.99999999	.99999999
34	.99999999	.99999999
35	.99999999	.99999999
36	.99999999	.99999999
37	.99999999	.99999999
38	.99999999	.99999999
39	.99999999	.99999999

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\sum

n = 45

X	.01	.02	.03	.04	.05	.06	.07	.08
1	.3630145	.5971201	.7460610	.8407034	.9035507	.9437334	.9610891	.9665333
2	.0703164	.2871114	.5264406	.7480854	.9030441	.9747109	.9838549	.9847070
3	.0103701	.0619144	.1591719	.2608537	.3501401	.4116100	.4509428	.4705924
4	.0010743	.0194990	.0455714	.0747133	.1066107	.1397511	.1747771	.2000913
5	.0000076	.0000094	.0109510	.0311400	.0789974	.1300679	.1849143	.2001890
6	.0000050	.0000269	.0021745	.0087401	.0239115	.0510319	.0908081	.1476304
7	.0000001	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
8		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
9		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
10			.0000007	.0000009	.0000010	.0000010	.0000010	.0000010
11				.0000001	.0000012	.0000108	.0000544	.0000272
12				.0000001	.0000001	.0000018	.0000097	.0000446
13					.0000002	.0000002	.0000015	.0000063
14						.0000000	.0000000	.0000000
15							.0000000	.0000000
16								.0000000
X	.09	.10	.11	.12	.13	.14	.15	.16
1	.9056496	.9712720	.9947210	.9960252	.9981017	.9989917	.9993334	.9996086
2	.9217007	.9476389	.9653624	.9733433	.9813192	.9860661	.9894000	.9918549
3	.9020194	.8400571	.8858250	.9186975	.9411910	.9610039	.9734891	.9819775
4	.8650879	.8210671	.7410921	.6046600	.451345	.301080	.201073	.141003
5	.818589	.7800691	.6805553	.6410993	.5124995	.3710679	.2051081	.10670661
6	.8153551	.8088754	.7745197	.6580057	.5197279	.3612645	.2058086	.1471833
7	.8059696	.7505074	.6186805	.4310360	.2676103	.1480897	.0818390	.0495110
8	.8046955	.7075996	.5172854	.3170900	.1841148	.0900910	.0410426	.0130497
9	.8173290	.6519940	.4517431	.2877901	.1536366	.0701360	.0354705	.0170100
10	.8050669	.6120102	.4027294	.2372991	.1001690	.0400560	.0170796	.0077337
11	.8017670	.6040246	.4000708	.2154115	.0965564	.0420673	.0161435	.0040879
12	.8004770	.6013015	.4007612	.2056414	.0855704	.0384370	.0101700	.0027308
13	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
14	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
15	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
16	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
17	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
18	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
19	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
20	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
21	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
22	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
23	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
24	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
25	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
26	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
27	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
28	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
29	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
30	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
31	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
32	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
33	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
34	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
35	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
36	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
37	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
38	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
39	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
40	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
41	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
42	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
43	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
44	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
45	.8000000	.6000000	.4000000	.2000000	.0800000	.0300000	.0100000	.0020000
X	.25	.26	.27	.28	.29	.30	.31	.32
1	.9999976	.9999997	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
2	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
3	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
4	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
5	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
6	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
7	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
8	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
9	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
10	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
11	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
12	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
13	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
14	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
15	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
16	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
17	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
18	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
19	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
20	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
21	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
22	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
23	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
24	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
25	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
26	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
27	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
28	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
29	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
30	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
31	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
32	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
33	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
34	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
35	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
36	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
37	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
38	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
39	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
40	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
41	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
42	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
43	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
44	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
45	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999

[illegible]

	1	2	3	4	5	6	7	8	9	0
1	1	0000000	1	0000000	1	0000000	1	0000000	1	0000000
2	2	0000000	2	0000000	2	0000000	2	0000000	2	0000000
3	3	0000000	3	0000000	3	0000000	3	0000000	3	0000000
4	4	0000000	4	0000000	4	0000000	4	0000000	4	0000000
5	5	0000000	5	0000000	5	0000000	5	0000000	5	0000000
6	6	0000000	6	0000000	6	0000000	6	0000000	6	0000000
7	7	0000000	7	0000000	7	0000000	7	0000000	7	0000000
8	8	0000000	8	0000000	8	0000000	8	0000000	8	0000000
9	9	0000000	9	0000000	9	0000000	9	0000000	9	0000000
10	10	0000000	10	0000000	10	0000000	10	0000000	10	0000000
11	11	0000000	11	0000000	11	0000000	11	0000000	11	0000000
12	12	0000000	12	0000000	12	0000000	12	0000000	12	0000000
13	13	0000000	13	0000000	13	0000000	13	0000000	13	0000000
14	14	0000000	14	0000000	14	0000000	14	0000000	14	0000000
15	15	0000000	15	0000000	15	0000000	15	0000000	15	0000000
16	16	0000000	16	0000000	16	0000000	16	0000000	16	0000000
17	17	0000000	17	0000000	17	0000000	17	0000000	17	0000000
18	18	0000000	18	0000000	18	0000000	18	0000000	18	0000000
19	19	0000000	19	0000000	19	0000000	19	0000000	19	0000000
20	20	0000000	20	0000000	20	0000000	20	0000000	20	0000000
21	21	0000000	21	0000000	21	0000000	21	0000000	21	0000000
22	22	0000000	22	0000000	22	0000000	22	0000000	22	0000000
23	23	0000000	23	0000000	23	0000000	23	0000000	23	0000000
24	24	0000000	24	0000000	24	0000000	24	0000000	24	0000000
25	25	0000000	25	0000000	25	0000000	25	0000000	25	0000000
26	26	0000000	26	0000000	26	0000000	26	0000000	26	0000000
27	27	0000000	27	0000000	27	0000000	27	0000000	27	0000000
28	28	0000000	28	0000000	28	0000000	28	0000000	28	0000000
29	29	0000000	29	0000000	29	0000000	29	0000000	29	0000000
30	30	0000000	30	0000000	30	0000000	30	0000000	30	0000000
31	31	0000000	31	0000000	31	0000000	31	0000000	31	0000000
32	32	0000000	32	0000000	32	0000000	32	0000000	32	0000000
33	33	0000000	33	0000000	33	0000000	33	0000000	33	0000000
34	34	0000000	34	0000000	34	0000000	34	0000000	34	0000000
35	35	0000000	35	0000000	35	0000000	35	0000000	35	0000000

[illegible]

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 45

λ	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	.99999999	1.00000000
7	.99999995	.99999997
8	.99999971	.99999984
9	.99999863	.99999923
10	.99999434	.99999671
11	.9997953	.9998765
12	.9993423	.9995880
13	.9981093	.9987705
14	.9951022	.9966956
15	.9884283	.9919528
16	.9753854	.9821511
17	.9517629	.9637729
18	.9130459	.9324218
19	.8551814	.8836534
20	.7761776	.8143510
21	.6775002	.7242578
22	.5646339	.6170041
23	.4463356	.50000000
24	.3326764	.3829959
25	.2325746	.2757422
26	.1517866	.1856490
27	.0920790	.1163466
28	.0517102	.0675782
29	.0267766	.0362271
30	.0127335	.0178489
31	.0055375	.0088472
32	.0021922	.0033044
33	.0007860	.0012295
34	.0002537	.0004120
35	.0000733	.0001235
36	.0000188	.0000329
37	.0000042	.0000077
38	.0000008	.0000016
39	.0000001	.0000003

$$P(c, n, c) = \sum_{r=0}^c \binom{n}{r} p^r (1-p)^{n-r}$$

n = 46

	.01	.02	.03	.04	.05	.06	.07	.08
1	.3701754	.4051797	.7536799	.8470756	.9055318	.9419394	.9645010	.9784106
2	.0775110	.2345321	.4012452	.5519706	.6768192	.7714637	.8415907	.8920531
3	.0110207	.0641367	.1593860	.2791846	.4059753	.5266316	.6334360	.7230928
4	.0011674	.0131939	.0487695	.1125998	.1969029	.2974271	.4036452	.5076072
5	.0000974	.0022177	.0119923	.0360435	.0786119	.1401537	.2177123	.3061750
6	.0000066	.0003017	.0024378	.0097178	.0263148	.0550284	.1001547	.1590419
7	.0000004	.0000345	.0004186	.0022223	.0075062	.0190483	.0396905	.0716150
8		.0000034	.0000617	.0004376	.0018495	.0056330	.0136844	.0281730
9		.0000003	.0000079	.0000751	.0003981	.0014586	.0041418	.0097574
10			.0000009	.0000114	.0000755	.0003336	.0011092	.0029961
11			.0000001	.0000015	.0000127	.0000679	.0002644	.0008207
12				.0000002	.0000019	.0000124	.0000566	.0002017
13					.0000003	.0000020	.0000109	.0000447
14						.0000003	.0000019	.0000089
15							.0000003	.0000016
16								.0000003
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$$P(c, n, p) = \sum_{i=0}^n \binom{n}{i} p^i (1-p)^{n-i}$$

n = 46

X	.25	.26	.27	.28	.29	.30	.31	.32
19	.0111408	.0169583	.0250138	.0358499	.0500405	.0680544	.0903653	.1173189
20	.0047434	.0075774	.0117155	.0175691	.0256045	.0363264	.0502519	.0676785
21	.0018645	.0031278	.0050505	.0077611	.0112130	.0179694	.0255222	.0346692
22	.0006764	.0011923	.0021776	.0033350	.0053164	.0082290	.0123889	.0181692
23	.0002864	.0004194	.000717	.0012207	.0021537	.0034853	.0054799	.0083831
24	.0000699	.0001361	.0002551	.0004611	.0008057	.0013653	.0022405	.0035776
25	.0000159	.0000407	.0000801	.0001519	.0002781	.0004926	.0008459	.0014104
26	.0000032	.0000112	.0000232	.0000461	.0000885	.0001640	.0002945	.0005139
27	.0000013	.0000028	.0000062	.0000129	.0000253	.0000523	.0000974	.0001710
28	.0000003	.0000007	.0000015	.0000035	.0000070	.0000142	.0000278	.0000527
29	.0000001	.0000001	.0000003	.0000008	.0000017	.0000037	.0000075	.0000139
30			.0000001	.0000002	.0000004	.0000009	.0000019	.0000039
31					.0000001	.0000002	.0000004	.0000007
32							.0000001	.0000002
X	.33	.34	.35	.36	.37	.38	.39	.40
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	.9999998	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	.9999973	.9999985	.9999992	.9999996	.9999998	.9999999	.9999999	1.0000000
4	.9999791	.9999881	.9999933	.9999963	.9999980	.9999990	.9999995	.9999997
5	.9998832	.9999107	.9999593	.9999765	.9999865	.9999924	.9999958	.9999977
6	.9994864	.9996820	.9998056	.9998827	.9999302	.9999590	.9999762	.9999864
7	.9981508	.9988065	.9992400	.9995225	.9997040	.9998190	.9998909	.9999351
8	.9943919	.9962295	.9974596	.9981645	.9989455	.9993389	.9995791	.9997198
9	.9853661	.9897576	.9929310	.9951892	.9967712	.9978644	.9986073	.9991048
10	.9665962	.9756806	.9825443	.9876478	.9913832	.9940747	.9959839	.9973174
11	.9323901	.9408494	.9618509	.9719523	.9796734	.9854804	.9897782	.9929087
12	.8772518	.9036131	.9253841	.9430583	.9571663	.9682415	.9767934	.9832896
13	.7980481	.8354444	.8681126	.8955443	.9186135	.9372466	.9525799	.9658537
14	.6960061	.7440689	.7874580	.8259151	.8591930	.8880258	.9120197	.9319739
15	.5775443	.6328780	.6850887	.7334487	.7774124	.8165994	.8510750	.8807268
16	.4530705	.5106636	.5674953	.6224891	.6746980	.7233458	.7685222	.8078420
17	.3342971	.3768886	.4448137	.5015604	.5578197	.6125360	.6647617	.7136992
18	.2310422	.2778023	.3282384	.3815210	.4366852	.4936848	.5484493	.6029429
19	.1491141	.1857703	.2271069	.2727359	.3220669	.3743371	.4286412	.4839824
20	.0896470	.1159024	.1468567	.1825575	.2228650	.2674424	.3157591	.3671089
21	.0501058	.0673124	.0845211	.1140760	.1442121	.1702256	.2103280	.2519228
22	.0259932	.0363214	.0496306	.0663883	.0870208	.1118793	.1412060	.1751025
23	.0124974	.0181793	.0258340	.0359043	.0488520	.0651341	.0851748	.1093296
24	.0055612	.0084270	.0124634	.0180115	.0254607	.0352382	.0477930	.0635745
25	.0022872	.0036524	.0055637	.0083662	.0122954	.0176783	.0248893	.0343421
26	.0008682	.0014298	.0022944	.0035918	.0054913	.0082073	.0120032	.0171924
27	.0003036	.0005217	.0008725	.0014226	.0022636	.0035108	.0053889	.0079580
28	.0000977	.0001751	.0003054	.0005188	.0008595	.0013902	.0021975	.0033977
29	.0000288	.0000540	.0000982	.0001738	.0002999	.0005050	.0008303	.0013348
30	.0000076	.0000152	.0000289	.0000534	.0000959	.0001682	.0002878	.0004811
31	.0000019	.0000039	.0000078	.0000150	.0000280	.0000512	.0000912	.0001587
32	.0000004	.0000009	.0000019	.0000038	.0000073	.0000142	.0000283	.0000477
33	.0000001	.0000002	.0000004	.0000009	.0000018	.0000036	.0000073	.0000130
34			.0000001	.0000002	.0000004	.0000009	.0000018	.0000036
35					.0000001	.0000002	.0000004	.0000009
36							.0000001	.0000002
X	.41	.42	.43	.44	.45	.46	.47	.48
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	.9999998	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000
5	.9999987	.9999993	.9999996	.9999998	.9999999	1.0000000	1.0000000	1.0000000
6	.9999923	.9999957	.9999977	.9999987	.9999993	.9999997	.9999998	.9999999
7	.9999820	.9999900	.9999975	.9999993	.9999996	.9999997	.9999998	.9999999
8	.9998414	.9999048	.9999437	.9999672	.9999812	.9999894	.9999941	.9999968
9	.9994329	.9996461	.9997824	.9998682	.9999215	.9999539	.9999734	.9999849
10	.9982344	.9988551	.9992688	.9995401	.9997152	.9998264	.9998959	.9999386
11	.9951527	.9967359	.9978351	.9985860	.9990908	.9994246	.9996417	.9997806
12	.9881443	.9917136	.9948255	.9963328	.9974189	.9983044	.9989040	.9993031
13	.9739392	.9810861	.9865073	.9905108	.9934291	.9955212	.9969958	.9980176
14	.9481219	.9610167	.9711412	.9789578	.9848915	.9893203	.9925701	.9949141
15	.9058329	.9267261	.9438173	.9575612	.9684262	.9768627	.9833191	.9881614
16	.8431400	.8737529	.8998433	.9216965	.9396867	.9542429	.9658179	.9748639
17	.7587303	.7994308	.8355700	.8670999	.8941280	.9168991	.9357480	.9510818
18	.6552170	.7044531	.7500048	.7913963	.8283481	.8607591	.8886908	.9123410
19	.5393250	.5936503	.6460050	.6955665	.7416383	.7837124	.8214592	.8547883
20	.4206416	.4854048	.5303940	.5846656	.6370880	.6879910	.7359974	.7793554
21	.3093005	.3598096	.4126493	.4669078	.5216088	.5787614	.6284119	.6786907
22	.2135058	.2561725	.3026755	.3524127	.4046292	.4587504	.5139252	.5670739
23	.1378890	.1708913	.2083998	.2501849	.2958671	.3447918	.3965472	.4499930
24	.0833053	.1064509	.1341073	.1653706	.2002204	.2389949	.2808819	.3250000
25	.0464749	.0617314	.0805351	.1032608	.1302034	.1615469	.1973370	.2374590
26	.0241357	.0332344	.0449176	.0596248	.0777819	.0997745	.1259170	.1568884
27	.0115978	.0165670	.0232155	.0319326	.0431397	.0578739	.0747631	.0946046
28	.0051489	.0076264	.0108882	.0151555	.0208145	.0283544	.0384159	.0516938
29	.0020994	.0032355	.0048802	.0070758	.0099204	.0137281	.0188930	.0258129
30	.0007847	.0012590	.0019734	.0030318	.0045684	.0067585	.0098088	.0139913
31	.0002698	.0004487	.0007307	.0011659	.0018239	.0027799	.0041859	.0062369
32	.0000844	.0001459	.0002469	.0004093	.0006649	.0010897	.0016560	.0025418
33	.0000240	.0000451	.0000758	.0001264	.0002204	.0003649	.0005819	.0008944
34	.0000062	.0000115	.0000211	.0000377	.0000661	.0001134	.0002196	.0003668
35	.0000014	.0000028	.0000053	.0000098	.0000176	.0000319	.0000558	.0000959
36	.0000003	.0000006	.0000012	.0000023	.0000043	.0000080	.0000145	.0000260
37	.0000001	.0000001	.0000002	.0000004	.0000009	.0000018	.0000034	.0000068
38				.0000001	.0000002	.0000003	.0000007	.0000013
39						.0000001	.0000002	.0000004

$$P(c,n,p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 46

x	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	.9999997	.9999998
8	.9999983	.9999991
9	.9999916	.9999954
10	.9999644	.9999797
11	.9998679	.9999218
12	.9995643	.9997122
13	.9990713	.9991793
14	.9985757	.9977131
15	.9917342	.9941242
16	.9818107	.9870520
17	.9633370	.9729620
18	.9320172	.9480973
19	.8815351	.9080376
20	.8148805	.8490022
21	.7258521	.7693044
22	.6192384	.6706310
23	.5043018	.5585020
24	.3883694	.4414980
25	.2816245	.3291690
26	.1913727	.2306956
27	.1213357	.1509978
28	.0714909	.0919624
29	.0389940	.0519027
30	.0196146	.0270380
31	.0099635	.0129480
32	.0050314	.0066750
33	.0024750	.0032669
34	.001145	.0016207
35	.0005617	.0008278
36	.0002455	.0004078
37	.000114	.000203
38	.0000525	.0001046
39	.0000205	.0000509
40	.0000091	.0000202

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 47

λ/p	.01	.02	.03	.04	.05	.06	.07	.08
1	.3764746	.6130761	.7610695	.8531926	.9102552	.9454231	.9669860	.9801378
2	.0804575	.2419450	.4137583	.5656948	.6882548	.7816923	.8501944	.8989617
3	.0116858	.0677406	.1667018	.2901760	.4195175	.5413215	.6480069	.7366096
4	.0012659	.0144127	.0520880	.1179768	.2073565	.3111793	.4197365	.5248460
5	.0001081	.0024412	.0130956	.0390522	.0845264	.1495901	.2307276	.3222695
6	.0000076	.0003401	.0027245	.0107708	.0289296	.0608880	.1083817	.1708125
7	.0000004	.0000399	.0004792	.0025221	.0084466	.0212551	.0439230	.0786091
8		.0000040	.0000724	.0005090	.0021323	.0064379	.0155748	.0316454
9		.0000004	.0000095	.0000896	.0004707	.0017090	.0048098	.0112306
10			.0000011	.0000139	.0000917	.0004011	.0013215	.0035370
11			.0000001	.0000019	.0000159	.0000838	.0003237	.0009948
12				.0000002	.0000025	.0000157	.0000711	.0002512
13					.0000003	.0000026	.0000141	.0000572
14						.0000004	.0000025	.0000116
15						.0000001	.0000004	.0000022
16							.0000001	.0000004
17								.0000001

λ/p	.09	.10	.11	.12	.13	.14	.15	.16
1	.9881165	.9929303	.9958185	.9975414	.9985632	.9991655	.9995184	.9997239
2	.9328776	.9560111	.9715283	.9817841	.9884723	.9927806	.9955239	.9972518
3	.8072245	.8616611	.9024787	.9321635	.9537924	.9688743	.9793111	.9864216
4	.6208160	.7044130	.7744653	.8312758	.8760614	.9104985	.9369446	.9554754
5	.4180199	.5122200	.6004247	.6796442	.7482967	.8059651	.8530863	.8906450
6	.2455318	.3285609	.4154332	.5018218	.5841117	.6596103	.7266536	.7844417
7	.1261170	.1857292	.2553844	.3320822	.4123780	.4928510	.5707272	.6428373
8	.0569426	.0927700	.1395224	.1965110	.2620757	.3338403	.4070408	.4848569
9	.0227355	.0411260	.0679223	.1040760	.1497809	.2044130	.2666014	.3343993
10	.0080753	.0162604	.0295746	.0494554	.0770689	.1131118	.1576772	.2102122
11	.0025657	.0057615	.0115642	.0211520	.0357819	.0566322	.0846338	.1203243
12	.0007328	.0018377	.0040767	.0081690	.0150306	.0257058	.0412766	.0627338
13	.0001890	.0005298	.0013004	.0028582	.0057282	.0106022	.0183227	.0298250
14	.0000442	.0001385	.0003766	.0008091	.0019859	.0039825	.0074171	.0129486
15	.0000094	.0000330	.0000993	.0002634	.0006279	.0013655	.0027432	.0051419
16	.0000018	.0000072	.0000239	.0000697	.0001814	.0004282	.0009286	.0018705
17	.0000003	.0000014	.0000053	.0000169	.0000480	.0001230	.0002882	.0006242
18	.0000001	.0000003	.0000011	.0000038	.0000117	.0000324	.0000821	.0001914
19			.0000002	.0000008	.0000026	.0000079	.0000215	.0000540
20				.0000001	.0000005	.0000018	.0000052	.0000140
21					.0000001	.0000004	.0000012	.0000033
22						.0000001	.0000002	.0000007
23							.0000001	.0000001

λ/p	.17	.18	.19	.20	.21	.22	.23	.24
1	.9974427	.9999110	.9999500	.9999721	.9999846	.9999915	.9999954	.9999975
2	.9982287	.9998931	.9999590	.9999645	.9999717	.9999791	.9999830	.9999860
3	.9911962	.9943587	.9964263	.9977612	.9986128	.9991494	.9994844	.9996977
4	.9657233	.9790991	.9859666	.9906886	.9939121	.9960641	.9974860	.9984132
5	.9199133	.9422526	.9589780	.9712764	.9801669	.9864907	.9909197	.9939757
6	.8329507	.8726938	.9045344	.9295186	.9487442	.9632689	.9740519	.9819244
7	.7082694	.7658107	.8151393	.8564424	.8902743	.9174209	.9387829	.9559846
8	.5286947	.6283895	.6923197	.7494381	.7992388	.8416792	.8770786	.9050110
9	.4051158	.4775614	.5482719	.6156827	.6782623	.7348492	.7846927	.8271746
10	.2695618	.3140908	.4018530	.4707810	.5388666	.6043122	.6656367	.7217460
11	.1637471	.2144153	.2713413	.3331243	.3980794	.4643874	.5302437	.5939903
12	.0908473	.1260518	.1683675	.2173676	.2721973	.3316382	.3942092	.4582872
13	.0460535	.0678612	.0959044	.1305501	.1718102	.2193113	.2730888	.3272644
14	.0213525	.0334709	.0517419	.0721152	.0946466	.1203197	.1490337	.1807370
15	.0090558	.0151374	.0240725	.0366369	.0535848	.0755880	.1031615	.1365976
16	.0035294	.0062836	.0106195	.0171238	.0264609	.0393333	.0564293	.0783605
17	.0012615	.0023966	.0043082	.0073673	.0120406	.0188820	.0285113	.0415792
18	.0004144	.0008407	.0016085	.0029194	.0050505	.0083633	.0133046	.0203986
19	.0001253	.0002715	.0005532	.0010662	.0019537	.0034186	.0057342	.0092509
20	.0000349	.0000807	.0001753	.0003590	.0006972	.0012899	.0022827	.0038778
21	.0000089	.0000221	.0000512	.0001115	.0002296	.0004493	.0008394	.0015023
22	.0000021	.0000056	.0000138	.0000320	.0000698	.0001445	.0002851	.0005378
23	.0000005	.0000013	.0000034	.0000084	.0000196	.0000439	.0000894	.0001779
24	.0000001	.0000003	.0000008	.0000021	.0000051	.0000118	.0000259	.0000543
25		.0000001	.0000002	.0000005	.0000012	.0000030	.0000069	.0000153
26				.0000001	.0000003	.0000007	.0000017	.0000040
27					.0000001	.0000001	.0000004	.0000010
28						.0000001	.0000001	.0000002

λ/p	.25	.26	.27	.28	.29	.30	.31	.32
1	.9999957	.9999993	.9999996	.9999998	.9999999	.9999999	1.0000000	1.0000000
2	.9999776	.9999875	.9999931	.9999962	.9999979	.9999989	.9999994	.9999997
3	.9999164	.9999223	.9999271	.9999310	.9999349	.9999385	.9999419	.9999455
4	.9990102	.9993898	.9996282	.9997760	.9998667	.9999216	.9999544	.9999738
5	.9960542	.9974482	.9983703	.9989721	.9993597	.9996060	.9997606	.9998564
6	.9875804	.9915813	.9943691	.9962832	.9975787	.9984432	.9990120	.9993811
7	.9678080	.9717519	.9840099	.9889637	.9924868	.9949546	.9966575	.9978155
8	.9478049	.9474576	.9614706	.9725913	.9804926	.9851971	.9875049	.9888114
9	.9248663	.9259188	.9320869	.9399737	.9484266	.9574321	.9675641	.9783470
10	.7719329	.8158682	.8535508	.8852415	.9113931	.9325823	.9494481	.9626421
11	.6543171	.7098269	.7600638	.8045086	.8430481	.8758268	.9031886	.9256170
12	.5282328	.5845055	.6437581	.6989035	.7491504	.7940105	.8332813	.8670108
13	.3902486	.4474999	.5147056	.5752975	.6340926	.6881181	.7345584	.7742714
14	.2718011	.3274546	.3861990	.4375699	.4825664	.5242828	.5625438	.5974438
15	.1759151	.2308325	.2707685	.3248667	.3620585	.4111123	.4507743	.4896409
16	.1055987	.1384166	.1768428	.2206354	.2698782	.3220011	.3778228	.4356097
17	.0587210	.0805026	.1073636	.1395650	.1771478	.2199059	.2673806	.3188744

$$f(x) = \sum_{n=0}^{\infty} \frac{f^{(n)}(a)}{n!} (x-a)^n$$

n = 47

	.35	.36	.37	.38	.39	.30	.31	.32
19	.0703268	.0433972	.0605029	.0820740	.1085270	.1401172	.1768990	.2187002
20	.0143367	.0816688	.0316161	.0448112	.0518134	.0831282	.1091470	.1401332
21	.0063428	.0100164	.0153088	.0228933	.0326909	.0450448	.0626870	.0836954
22	.0025843	.0042847	.0066647	.0105513	.0160378	.0234765	.0334644	.0465202
23	.0009735	.0016955	.0028492	.0046303	.0072924	.0111512	.0165842	.0240252
24	.0003389	.0006204	.0010940	.0018631	.0030709	.0049084	.0076215	.0115146
25	.0001040	.0002098	.0003884	.0006934	.0011967	.0020003	.0032446	.0051153
26	.0000324	.0000655	.0001274	.0002385	.0004311	.0007540	.0012782	.0021039
27	.0000089	.0000169	.0000306	.0000575	.0001035	.0002626	.0004654	.0008001
28	.0000022	.0000050	.0000108	.0000222	.0000440	.0000844	.0001554	.0002810
29	.0000005	.0000012	.0000028	.0000060	.0000125	.0000250	.0000485	.0000910
30	.0000001	.0000003	.0000007	.0000015	.0000032	.0000068	.0000138	.0000271
31		.0000001	.0000001	.0000003	.0000008	.0000017	.0000036	.0000074
32				.0000001	.0000002	.0000004	.0000009	.0000019
33					.0000001	.0000001	.0000002	.0000004
34								.0000001
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AMCP 706-109

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 47

	.41	.42	.43	.44	.45	.46	.47	.48
37	.0000002	.0000003	.0000006	.0000013	.0000024	.0000046	.0000086	.0000157
38		.0000001	.0000001	.0000003	.0000005	.0000010	.0000019	.0000037
39					.0000001	.0000002	.0000004	.0000008
40							.0000001	.0000001
	.49	.50						
1	1.0000000	1.0000000						
2	1.0000000	1.0000000						
3	1.0000000	1.0000000						
4	1.0000000	1.0000000						
5	1.0000000	1.0000000						
6	1.0000000	1.0000000						
7	.9999998	.9999999						
8	.9999990	.9999995						
9	.9999977	.9999972						
10	.9999777	.9999875						
11	.9999152	.9999508						
12	.9997130	.9998270						
13	.9991304	.9994557						
14	.9976332	.9984562						
15	.9941065	.9960286						
16	.9866732	.9906881						
17	.9783896	.9800970						
18	.9673644	.9605297						
19	.9507291	.9380675						
20	.9285258	.9185199						
21	.8994804	.8891533						
22	.8718341	.8519677						
23	.8469437	.8158655						
24	.8241763	.7800000						
25	.8039295	.7454335						
26	.7855961	.7100323						
27	.7686538	.678467						
28	.7529146	.648801						
29	.7381725	.619385						
30	.7241105	.594703						
31	.7103336	.5719930						
32	.6963952	.5509319						
33	.6822295	.530714						
34	.6678272	.5115418						
35	.6531346	.4935743						
36	.6381024	.4767730						
37	.6227281	.4610492						
38	.6070068	.4463125						
39	.5909015	.4325028						
40	.5743603	.4195005						
41		.4072001						

$$f(x, y) = \sum_{n=0}^{\infty} \left(\frac{x^n}{n!} \right) \left(\frac{y^n}{n!} \right) \frac{n!}{n!} = \sum_{n=0}^{\infty} \frac{x^n y^n}{n!}$$

x = 40

	.01	.02	.03	.04	.05	.06	.07	.08
1	.3827094	.6208146	.7682375	.8590649	.9147424	.9486977	.9692969	.9817868
2	.0834177	.2493676	.4241776	.5771947	.6992546	.7915161	.8583696	.9054558
3	.0123735	.0712247	.1741135	.3011968	.4325544	.5557438	.6682159	.7695978
4	.0013701	.0154793	.0555254	.1248648	.2179645	.3249879	.4357099	.5417871
5	.0001197	.0026006	.0142654	.0422091	.0906679	.1592855	.2439578	.3384941
6	.0000086	.0007821	.0030356	.0117021	.0317095	.0662101	.1169478	.1829307
7	.0000005	.0000459	.0008465	.0028521	.0094708	.0236331	.0484352	.0859854
8		.0000047	.0000846	.0005895	.0024480	.0073270	.0172491	.0354052
9		.0000004	.0000114	.0001064	.0005537	.0019938	.0055865	.0128641
10			.0000014	.0000169	.0001106	.0004795	.0015637	.0041525
11			.0000001	.0000024	.0000197	.0001028	.0003936	.0011982
12				.0000003	.0000031	.0000198	.0000888	.0003107
13					.0000004	.0000034	.0000181	.0000727
14					.0000001	.0000005	.0000033	.0000154
15						.0000000	.0000000	.0000030
16							.0000001	.0000005
17								.0000001
	.09	.10	.11	.12	.13	.14	.15	.16
1	.9891860	.9936373	.9962785	.9978364	.9987500	.9992823	.9995906	.9997600
2	.9378491	.9597030	.9742003	.9836750	.9897842	.9936745	.9961211	.9976471
3	.8105333	.8710967	.9100742	.9382939	.9583008	.9722212	.9817430	.9881545
4	.6375928	.7201378	.7885468	.8434063	.8861664	.9186711	.9428321	.9604293
5	.4363716	.5314393	.6195692	.6978400	.7649061	.8205998	.8655825	.9010184
6	.2610558	.3469340	.4357823	.5231605	.6054557	.6801068	.7456185	.8014342
7	.1368643	.2000131	.2729697	.3524510	.4347033	.5161984	.5938993	.6654940
8	.0631683	.1020659	.1522732	.2127795	.2796375	.3510119	.4322555	.5101318
9	.0250142	.0442904	.0757983	.1151682	.1643792	.2225329	.2879673	.3594726
10	.0093947	.0187469	.0337929	.0560099	.0865215	.1258938	.1740158	.2300821
11	.0030615	.0068114	.0135453	.0245484	.0411492	.0645393	.0955903	.1347064
12	.0008978	.0022301	.0049003	.0097277	.0177282	.0300355	.0477802	.0719483
13	.0002379	.0006606	.0016058	.0034962	.0069375	.0131658	.0249944	.0439394
14	.0000572	.0001777	.0004782	.0011431	.0024724	.0049093	.0095529	.0156488
15	.0000135	.0000433	.0001298	.0003409	.0008044	.0017318	.0034443	.0063910
16	.0000035	.0000097	.0000322	.0000930	.0002395	.0005594	.0012008	.0023939
17	.0000005	.0000020	.0000073	.0000233	.0000553	.0001367	.0003843	.0008234
18	.0000001	.0000004	.0000013	.0000053	.0000164	.0000451	.0001130	.0002606
19		.0000001	.0000003	.0000011	.0000033	.0000113	.0000306	.0000759
20			.0000001	.0000002	.0000008	.0000026	.0000076	.0000204
21				.0000002	.0000006	.0000018	.0000051	.0000122
22					.0000001	.0000004	.0000012	.0000030
23						.0000001	.0000003	.0000008
	.17	.18	.19	.20	.21	.22	.23	.24
1	.9998695	.9999270	.9999595	.9999777	.9999878	.9999934	.9999964	.9999981
2	.9985861	.9991581	.9995037	.9997101	.9998322	.9999038	.9999454	.9999693
3	.9924008	.9951929	.9969911	.9981379	.9988604	.9993102	.9995870	.9997554
4	.9730085	.9813458	.9879539	.9921111	.9948992	.9967429	.9979456	.9987198
5	.9281023	.9480850	.9641059	.9751608	.9830534	.9885968	.9924299	.9950407
6	.8477344	.8852144	.9148787	.9378701	.9553430	.9683777	.9779315	.9848167
7	.7294652	.7850496	.8321244	.8710577	.9025530	.9275074	.9468948	.9616781
8	.5841224	.6531253	.7156554	.7708320	.8183563	.8583424	.8912706	.9178366
9	.4315562	.5047105	.5756410	.6424337	.7036516	.7583634	.8061185	.8468827
10	.2926740	.3594155	.4296726	.4997613	.5681355	.6330336	.6930740	.7472981
11	.1817356	.2359565	.2961386	.3606557	.4276447	.4951708	.5613845	.6246519
12	.1032403	.1419572	.1879335	.2405190	.2986325	.3600430	.4235497	.4868560
13	.0536684	.0781355	.1096724	.1479116	.1920915	.2440237	.3003454	.3608810
14	.0255517	.0396612	.0580367	.0838022	.1150529	.1527802	.1968233	.2466564
15	.0111546	.0184174	.0290257	.0437326	.0633248	.0884419	.1195178	.1567159
16	.0044706	.0078773	.0131756	.0210264	.0321569	.0473093	.0671777	.0923374
17	.0016470	.0030963	.0055073	.0093186	.0150688	.0233813	.0349324	.0504067
18	.0005584	.0011208	.0021215	.0038090	.0065184	.0106774	.0168021	.0254819
19	.0001744	.0003739	.0007537	.0014368	.0026040	.0045064	.0074754	.0119264
20	.0000508	.0001151	.0002471	.0005005	.0009411	.0017588	.0030766	.0051674
21	.0000133	.0000327	.0000748	.0001610	.0003278	.0006343	.0011714	.0020724
22	.0000033	.0000086	.0000209	.0000479	.0001033	.0002116	.0004126	.0007693
23	.0000007	.0000021	.0000054	.0000131	.0000301	.0000683	.0001344	.0002643
24	.0000003	.0000009	.0000023	.0000053	.0000126	.0000286	.0000605	.0001240
25		.0000001	.0000003	.0000008	.0000020	.0000049	.0000113	.0000247
26			.0000001	.0000002	.0000005	.0000012	.0000029	.0000067
27				.0000001	.0000003	.0000007	.0000017	.0000040
28					.0000001	.0000003	.0000008	.0000020
29						.0000001	.0000003	.0000008
	.25	.26	.27	.28	.29	.30	.31	.32
1	.9999990	.9999995	.9999997	.9999999	.9999999	1.0000000	1.0000000	1.0000000
2	.9999829	.9999906	.9999948	.9999972	.9999985	.9999992	.9999996	.9999998
3	.9998367	.9999170	.9999524	.9999819	.9999954	.9999992	.9999999	.9999999
4	.9952118	.9985204	.9997273	.9998287	.9998994	.9999416	.9999655	.9999810
5	.9967932	.9979530	.9987099	.9991972	.9995067	.9997007	.9998207	.9998939
6	.9896988	.9931067	.9954494	.9970361	.9980952	.9987920	.9992441	.9995332
7	.9727511	.9809034	.9868069	.9910131	.9939534	.9960011	.9973874	.9983165
8	.9388357	.9551781	.9676276	.9769915	.9836413	.9882246	.9913825	.9934881
9	.8869430	.9088549	.9212723	.9348499	.9486413	.9626417	.9758886	.9879886
10	.7951652	.8365183	.8715101	.9005382	.9241628	.9430372	.9578479	.9692677
11	.6816461	.7373977	.7853053	.8271138	.8638682	.8955534	.9217291	.9434650
12	.5552289	.6170891	.6751604	.7284729	.7763807	.8185554	.8549526	.8857644
13	.4232446	.4867548	.5495505	.6101952	.6674593	.7203758	.7682675	.8107478
14	.2914130	.3599430	.4208940	.4828192	.5442590	.6038550	.6604185	.7139886
15	.1598664	.2285543	.3019347	.3589814	.4184558	.4790112	.5392838	.5979779
16	.1231774	.1598447	.2022027	.2490207	.3019845	.3577345	.4159854	.4752997

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 40

	.41	.42	.43	.44	.45	.46	.47	.48
36	.00000018	.00000036	.00000069	.00000128	.00000235	.00000422	.00000748	.00001279
37	.00000004	.00000008	.00000016	.00000032	.00000060	.00000118	.00000205	.00000347
38	.00000001	.00000002	.00000003	.00000007	.00000014	.00000027	.00000051	.00000093
39			.00000001	.00000001	.00000003	.00000006	.00000011	.00000022
40					.00000001	.00000001	.00000002	.00000004
41								.00000001
	.49	.50						
1	1.00000000	1.00000000						
2	1.00000000	1.00000000						
3	1.00000000	1.00000000						
4	1.00000000	1.00000000						
5	1.00000000	1.00000000						
6	1.00000000	1.00000000						
7	.99999999	.99999999						
8	.99999994	.99999997						
9	.99999989	.99999993						
10	.99999981	.99999992						
11	.99999978	.99999992						
12	.99999971	.99999989						
13	.99999961	.99999984						
14	.99999947	.99999979						
15	.99999929	.99999964						
16	.99999905	.99999941						
17	.99999875	.99999915						
18	.99999839	.99999883						
19	.99999797	.99999845						
20	.99999759	.99999817						
21	.99999715	.99999776						
22	.99999665	.99999735						
23	.99999610	.99999689						
24	.99999550	.99999639						
25	.99999485	.99999574						
26	.99999415	.99999514						
27	.99999340	.99999449						
28	.99999260	.99999379						
29	.99999175	.99999304						
30	.99999085	.99999224						
31	.99998990	.99999149						
32	.99998890	.99999069						
33	.99998785	.99998984						
34	.99998675	.99998884						
35	.99998560	.99998779						
36	.99998440	.99998659						
37	.99998315	.99998534						
38	.99998185	.99998404						
39	.99998050	.99998279						
40	.99997910	.99998149						
41	.99997765	.99998014						
42	.99997615	.99997864						
43	.99997460	.99997719						
44	.99997300	.99997559						
45	.99997135	.99997394						
46	.99996965	.99997224						
47	.99996790	.99997054						
48	.99996610	.99996884						
49	.99996425	.99996704						
50	.99996235	.99996514						
51	.99996040	.99996329						
52	.99995840	.99996139						
53	.99995635	.99995944						
54	.99995425	.99995734						
55	.99995210	.99995519						
56	.99994990	.99995299						
57	.99994765	.99995079						
58	.99994535	.99994849						
59	.99994290	.99994619						
60	.99994040	.99994389						
61	.99993785	.99994159						
62	.99993525	.99993929						
63	.99993260	.99993699						
64	.99992990	.99993469						
65	.99992715	.99993239						
66	.99992435	.99993009						
67	.99992150	.99992779						
68	.99991860	.99992549						
69	.99991565	.99992319						
70	.99991265	.99992089						
71	.99990960	.99991859						
72	.99990650	.99991629						
73	.99990335	.99991399						
74	.99990015	.99991169						
75	.99989690	.99990939						
76	.99989360	.99990709						
77	.99989025	.99990479						
78	.99988685	.99990249						
79	.99988340	.99990019						
80	.99987990	.99989789						
81	.99987635	.99989559						
82	.99987275	.99989329						
83	.99986910	.99989099						
84	.99986540	.99988869						
85	.99986165	.99988639						
86	.99985785	.99988409						
87	.99985400	.99988179						
88	.99985010	.99987949						
89	.99984615	.99987719						
90	.99984215	.99987489						
91	.99983810	.99987259						
92	.99983400	.99987029						
93	.99982985	.99986799						
94	.99982565	.99986569						
95	.99982140	.99986339						
96	.99981710	.99986109						
97	.99981275	.99985879						
98	.99980835	.99985649						
99	.99980390	.99985419						
100	.99980000	.99985189						

$$P(n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

x	.25	.26	.27	.28	.29	.30	.31	.32
17	.0836248	.1122742	.1466445	.1867004	.2330300	.2866045	.3370531	.3943321
18	.0456829	.0640907	.0874555	.1161176	.1503042	.1899080	.2349150	.2845075
19	.0211033	.0340070	.0508253	.0718643	.0974977	.1279721	.1633375	.2036288
20	.0100557	.0167868	.0250318	.0352867	.0479614	.0625071	.0793514	.0988030
21	.0047300	.0076654	.0119977	.0181648	.0267453	.0383396	.0533309	.0722865
22	.0019131	.0031854	.0053404	.0084741	.0130290	.0194500	.0280360	.0392857
23	.0007173	.0011818	.0020866	.0036677	.0060998	.0098015	.0142323	.0208548
24	.0002493	.0004682	.0008459	.0014737	.0024811	.0040463	.0063390	.0098167
25	.0000803	.0001545	.0003007	.0005493	.0009684	.0016514	.0027290	.0043781
26	.0000239	.0000497	.0000991	.0001898	.0003505	.0006254	.0010808	.0018094
27	.0000066	.0000144	.0000303	.0000607	.0001175	.0002125	.0003744	.0006436
28	.0000017	.0000039	.0000085	.0000180	.0000365	.0000713	.0001347	.0002463
29	.0000004	.0000010	.0000025	.0000050	.0000105	.0000214	.0000423	.0000809
30	.0000001	.0000003	.0000008	.0000018	.0000038	.0000079	.0000153	.0000305
31			.0000001	.0000003	.0000007	.0000015	.0000031	.0000066
32				.0000001	.0000002	.0000004	.0000009	.0000019
33						.0000001	.0000002	.0000004
34							.0000001	.0000002
35								.0000001
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$$H(n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 40

	.41	.42	.43	.44	.45	.46	.47	.48
34	.0000553	.0000285	.0001718	.0002931	.0004894	.0008008	.0012883	.0020149
35	.0000159	.0000094	.0000534	.0000297	.0000162	.0000089	.0000040	.0000019
36	.0000041	.0000020	.0000011	.0000006	.0000003	.0000001	.0000000	.0000000
37	.0000010	.0000005	.0000003	.0000001	.0000000	.0000000	.0000000	.0000000
38	.0000002	.0000001	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
39								
40								
41						.0000001	.0000001	.0000001
	.49	.50						
34	.0000000	.0000000						
35	.0000000	.0000000						
36	.0000000	.0000000						
37	.0000000	.0000000						
38	.0000000	.0000000						
39	.0000000	.0000000						
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96	.0000000	.0000000						
97	.0000000	.0000000						
98	.0000000	.0000000						
99	.0000000	.0000000						
100	.0000000	.0000000						
101	.0000000	.0000000						
102	.0000000	.0000000						

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 50

X_p	.41	.42	.43	.44	.45	.46	.47	.48
35	.0000320	.0000585	.0001043	.0001820	.0003105	.0005187	.0008486	.0013607
36	.0000090	.0000170	.0000316	.0000572	.0001015	.0001761	.0002992	.0004980
37	.0000023	.0000045	.0000087	.0000144	.0000232	.0000345	.0000522	.0000762
38	.0000005	.0000011	.0000022	.0000043	.0000082	.0000153	.0000280	.0000504
39	.0000001	.0000002	.0000005	.0000010	.0000020	.0000039	.0000074	.0000138
40			.0000001	.0000002	.0000004	.0000009	.0000017	.0000034
41					.0000001	.0000002	.0000004	.0000007
42							.0000001	.0000001

X_p	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	1.0000000	1.0000000
8	.9999999	.9999999
9	.9999999	.9999999
10	.9999997	.9999992
11	.9999782	.9999881
12	.9999207	.9999549
13	.9997411	.9998471
14	.9992368	.9995319
15	.9979562	.9986989
16	.9950034	.9966998
17	.9887974	.9923267
18	.9768721	.9835804
19	.9558664	.9675457
20	.9218757	.9405398
21	.8712563	.8986806
22	.8017797	.8388818
23	.7137861	.7600562
24	.6108655	.6640945
25	.4996205	.5561376
26	.3884627	.4438624
27	.2857716	.3359035
28	.1980704	.2399438
29	.1288552	.1611182
30	.0784062	.1013194
31	.0444748	.0594602
32	.0234453	.0324543
33	.0114476	.0164196
34	.0051600	.0076733
35	.0021395	.0033002
36	.0008128	.0013011
37	.0002817	.0004681
38	.0000886	.0001529
39	.0000252	.0000451
40	.0000064	.0000119
41	.0000015	.0000028
42	.0000003	.0000006
43	.0000001	.0000001

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$$F(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 51

	.01	.02	.03	.04	.05	.06	.07	.08
1	.4010440	.6431137	.7884766	.8753096	.9269023	.9573891	.9753038	.9857708
2	.0924909	.2716606	.4548366	.6103426	.7306923	.8186771	.8805022	.9226676
3	.0145735	.0821438	.1968675	.3343353	.4725219	.5973281	.7021121	.7854867
4	.0017184	.0189715	.0465532	.1046497	.2050558	.3665600	.6028010	.8066500
5	.0001602	.0035007	.0181891	.0525778	.1104156	.2189015	.4047135	.6873422
6	.0000122	.0005328	.0041286	.0157928	.0410682	.0837464	.1445613	.2211602
7	.0000008	.0000685	.0007947	.0040421	.0130859	.0318471	.0636849	.1103721
8		.0000076	.0001319	.0004946	.0036182	.0105510	.0245512	.0484409
9		.0000007	.0000191	.0001732	.0008776	.0030747	.0083507	.0188217
10		.0000001	.0000024	.0000296	.0001884	.0007947	.0025247	.0065161
11			.0000003	.0000045	.0000361	.0001835	.0006829	.0020219
12				.0000006	.0000062	.0000381	.0001662	.0005652
13				.0000001	.0000010	.0000071	.0000366	.0001430
14					.0000001	.0000002	.0000012	.0000073
15						.0000002	.0000013	.0000064
16							.0000002	.0000013
17								.0000002
18								
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$$P(n, r) = \sum_{k=0}^n \binom{n}{k} P^k (1-P)^{n-k}$$

n = 51

	.25	.26	.27	.28	.29	.30	.31	.32
16	.1855922	.2115120	.2370034	.2627232	.2883779	.3138256	.3390681	.3640013
17	.1145013	.1506227	.1828333	.2107411	.2340383	.2525314	.2661973	.2750758
18	.0659104	.0906632	.1124243	.1307485	.1450783	.1559311	.1638601	.1694602
19	.0351107	.0508772	.0671023	.0833720	.1001803	.1170340	.1334218	.1490266
20	.0176215	.0265950	.0380437	.0515023	.0665513	.0827940	.1000000	.1179466
21	.0081766	.0129445	.0197986	.0291232	.0421414	.0588755	.0800985	.1062806
22	.0035291	.0058645	.0094002	.0145684	.0221476	.0331990	.0482078	.0678220
23	.0014166	.0024724	.0041537	.0067419	.0105890	.0161194	.0238321	.0342776
24	.0005287	.0009296	.0017099	.0029072	.0047761	.0075974	.0117233	.0175775
25	.0001834	.0003536	.0006546	.0011665	.0020061	.0033367	.0053764	.0084091
26	.0000591	.0001192	.0002130	.0004354	.0007841	.0013641	.0022967	.0037493
27	.0000177	.0000378	.0000771	.0001511	.0002850	.0005188	.0009131	.0015565
28	.0000049	.0000110	.0000237	.0000487	.0000963	.0001834	.0003375	.0006010
29	.0000013	.0000030	.0000067	.0000146	.0000302	.0000602	.0001154	.0002156
30	.0000003	.0000008	.0000018	.0000040	.0000088	.0000183	.0000369	.0000718
31	.0000001	.0000002	.0000004	.0000010	.0000024	.0000052	.0000109	.0000221
32			.0000001	.0000002	.0000006	.0000013	.0000030	.0000063
33				.0000001	.0000001	.0000001	.0000001	.0000001
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$$P(n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 51

$\frac{r}{n}$.41	.42	.43	.44	.45	.46	.47	.48
32	.0014114	.0022601	.0035387	.0054214	.0081324	.0119521	.0172203	.0243359
33	.0005591	.0008972	.0014591	.0023209	.0036131	.0055087	.0082305	.0120570
34	.0001901	.0003289	.0005558	.0009182	.0014842	.0023485	.0036405	.0055311
35	.0000617	.0001110	.0001950	.0003348	.0005420	.0009234	.0014856	.0023420
36	.0000164	.0000344	.0000629	.0001121	.0001956	.0003337	.0005574	.0009121
37	.0000050	.0000098	.0000185	.0000344	.0000623	.0001104	.0001916	.0003255
38	.0000012	.0000025	.0000050	.0000096	.0000181	.0000337	.0000601	.0001060
39	.0000003	.0000006	.0000012	.0000024	.0000048	.0000092	.0000171	.0000313
40	.0000001	.0000001	.0000003	.0000006	.0000011	.0000023	.0000044	.0000084
41			.0000001	.0000001	.0000002	.0000005	.0000010	.0000020
42						.0000001	.0000002	.0000004
43								.0000001

$\frac{r}{n}$	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.000000	1.0000000
5	1.000000	.9999999
6	1.0000000	1.0000000
7	1.0000000	1.0000000
8	.9999999	.9999999
9	.9999993	.9999997
10	.9999987	.9999983
11	.9999863	.9999928
12	.9999489	.9999715
13	.9998291	.9999010
14	.9994839	.9996895
15	.9985637	.9991154
16	.9964503	.9976993
17	.9918383	.9945132
18	.9827155	.9879535
19	.9661592	.9755631
20	.9385311	.9540427
21	.8960598	.9196102
22	.8358227	.8687812
23	.7569025	.7994690
24	.6612966	.7120753
25	.5541305	.6101160
26	.4429300	.5000000
27	.3360902	.3898840
28	.2410440	.2879247
29	.1627706	.2005310
30	.1031262	.1312188
31	.0611022	.0803898
32	.0337507	.0459573
33	.0173265	.0244369
34	.0082400	.0120465
35	.0035195	.0054868
36	.0014629	.0023007
37	.0005419	.0008846
38	.0001832	.0003105
39	.0000563	.0000990
40	.0000156	.0000283
41	.0000039	.0000074
42	.0000009	.0000017
43	.0000002	.0000003
44		.0000001

	.01	.02	.03	.04	.05	.06	.07	.08
1	.4070336	.6502514	.7948223	.8802973	.9305572	.952450	.9670325	.9869092
2	.0955764	.2790897	.4648458	.6209413	.7405031	.8259990	.8871383	.9277159
3	.0153586	.0859341	.2046065	.3453756	.4854305	.6166091	.7415944	.8564617
4	.0018465	.0202349	.0704686	.1540105	.2616886	.3804061	.5081572	.6362370
5	.0001758	.0038101	.0196400	.0563342	.1174241	.2004070	.2954596	.4036048
6	.0000137	.0005922	.0045505	.0172642	.0445356	.0901097	.1543719	.2344547
7	.0000009	.0000778	.0008947	.0045121	.0144080	.0349610	.0693463	.1192352
8	.0000001	.0000088	.0001517	.0010205	.0040916	.0118208	.0272906	.0533954
9		.0000009	.0000025	.0000202	.0010146	.0035273	.0094047	.0211912
10		.0000001	.0000002	.0000034	.0000229	.0000935	.0024325	.00675005
11			.0000003	.0000055	.0000437	.0002202	.0009119	.0023614
12				.0000008	.0000077	.0000468	.0002024	.0006818
13				.0000001	.0000012	.0000070	.0000457	.0001768
14					.0000002	.0000016	.0000094	.0000417
15						.0000002	.0000010	.0000050
16							.0000003	.0000018
17								.0000003
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$$P(c, n; p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 52

X	.41	.42	.43	.44	.45	.46	.47	.48
28	.0417033	.0567220	.0755996	.0980073	.1267246	.1595266	.1974947	.2402865
29	.0422056	.0514259	.0643962	.0807212	.0977205	.1014570	.1297052	.1629051
30	.0111104	.0162663	.0232894	.0326560	.0448744	.0604698	.0799546	.1037914
31	.0051689	.0078501	.0116607	.0169546	.0241455	.0337016	.0461305	.0619571
32	.0022348	.0035250	.0054354	.0081995	.0121094	.0175191	.0248437	.0345520
33	.0009668	.0014696	.0023533	.0036891	.0056488	.0084737	.0124587	.0179299
34	.0004332	.0006676	.0009442	.0015364	.0024422	.0038038	.0057578	.0084832
35	.0001144	.0002025	.0003502	.0005915	.0009770	.0015789	.0024984	.0038727
36	.0000362	.0000666	.0001197	.0002101	.0003605	.0006049	.0009936	.0015984
37	.0000105	.0000201	.0000376	.0000686	.0001223	.0002131	.0003435	.0006072
38	.0000028	.0000056	.0000108	.0000205	.0000380	.0000688	.0001189	.0002114
39	.0000007	.0000014	.0000028	.0000056	.0000108	.0000203	.0000373	.0000692
40	.0000001	.0000003	.0000007	.0000014	.0000028	.0000054	.0000104	.0000194
41		.0000001	.0000001	.0000003	.0000006	.0000013	.0000026	.0000051
42				.0000001	.0000001	.0000001	.0000001	.0000002
43						.0000001	.0000001	.0000002
44							.0000001	.0000001
45								.0000001
46								
47								
48								
49								
50								
51	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
52	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
53	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
54	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
55	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
56	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
57	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
58	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
59	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
60	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
61	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
62	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
63	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
64	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
65	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
66	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
67	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
68	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
69	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
70	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
71	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
72	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
73	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
74	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
75	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
76	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
77	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
78	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
79	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
80	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
81	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
82	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
83	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
84	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
85	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
86	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
87	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
88	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
89	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
90	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
91	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
92	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
93	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
94	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
95	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
96	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
97	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
98	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
99	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
100	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

53

X	.01	.02	.03	.04	.05	.06	.07	.08
1	.4129633	.6572464	.8009776	.8850854	.9340293	.9623490	.9796408	.9879564
2	.0960610	.3065129	.4747451	.6313155	.7500058	.8349766	.8934309	.9324513
3	.0161549	.0897972	.2124137	.3563982	.4981841	.6235925	.7266771	.8069616
4	.0019820	.0215489	.0744899	.1616651	.2728700	.3942813	.5131400	.6271454
5	.0001928	.0041386	.0211647	.0602416	.1246370	.2112070	.3125497	.4198173
6	.0000153	.0006566	.0050031	.0188271	.0481800	.0967275	.1644665	.2479869
7	.0000010	.0000801	.0010044	.0050222	.0159876	.0382700	.0752981	.1284527
8	.0000001	.0000102	.0001740	.0011601	.0046113	.0132167	.0302345	.0586626
9		.0000010	.0000264	.0002348	.0011685	.0040216	.0107311	.0237676
10		.0000001	.0000035	.0000421	.0002625	.0010870	.0033912	.0085958
11			.0000004	.0000067	.0000527	.0002629	.0009603	.0027909
12				.0000010	.0000095	.0000572	.0002451	.0008177
13				.0000001	.0000015	.0000113	.0000566	.0002172
14					.0000002	.0000020	.0000119	.0000528
15						.0000003	.0000023	.0000118
16							.0000004	.0000023
17							.0000001	.0000004
18								.0000001
X	.09	.10	.11	.12	.13	.14	.15	.16
1	.9932517	.9962429	.9979219	.9988502	.9991770	.9996624	.9998184	.9999030
2	.0067481	.0037571	.0020781	.0011498	.0008230	.0005376	.0003816	.0002970
3	.0001519	.0001020	.0000644	.0000394	.0000249	.0000160	.0000105	.0000073
4	.0000199	.0000129	.0000081	.0000048	.0000030	.0000019	.0000012	.0000008
5	.0000026	.0000017	.0000011	.0000007	.0000004	.0000003	.0000002	.0000001
6	.0000004	.0000003	.0000002	.0000001	.0000001	.0000000	.0000000	.0000000
7	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
8	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
9	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
10	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
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12	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
13	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
14	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
15	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
16	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
17	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
18	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
19	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
20	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
21	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
22	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
23	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
24	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
25	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
X	.17	.18	.19	.20	.21	.22	.23	.24
1	.9999486	.9999730	.9999859	.9999927	.9999962	.9999981	.9999990	.9999995
2	.0000514	.0000270	.0000141	.0000073	.0000038	.0000019	.0000010	.0000005
3	.0000017	.0000083	.0000040	.0000026	.0000013	.0000007	.0000004	.0000002
4	.0000007	.0000032	.0000016	.0000008	.0000004	.0000002	.0000001	.0000000
5	.0000002	.0000001	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
6	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
7	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
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21	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
22	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
23	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
24	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
25	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
X	.25	.26	.27	.28	.29	.30	.31	.32
1	.9999998	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	.0000002	.0000001	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
3	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
4	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
5	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
6	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
7	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
8	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
9	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
10	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
11	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

$n \backslash p$.41	.42	.43	.44	.45	.46	.47	.48
25	.2127125	.2658942	.3160000	.3703057	.4271334	.4853839	.5437627	.6011800
26	.1463372	.1835910	.2253547	.2721943	.3238357	.3776804	.4345411	.4926927
27	.0921736	.1194116	.1517131	.1891770	.2316894	.2769030	.3232336	.3748763
28	.0545346	.0731844	.0961569	.1239491	.1567880	.1947553	.2377346	.2853335
29	.0308469	.0420503	.0573431	.0763593	.0998823	.1288012	.1631565	.2000423
30	.0156970	.0226133	.0319349	.0441249	.0597451	.0793239	.1033374	.1321660
31	.0076088	.0113849	.0166612	.0238633	.0334735	.0460150	.0620878	.0820378
32	.0034378	.0053415	.0081124	.0120517	.0175256	.0249631	.0348485	.0477065
33	.0014454	.0023329	.0036786	.0056714	.0085549	.0126340	.0183781	.0259194
34	.0005643	.0009464	.0015501	.0024813	.0038843	.0059506	.0088870	.0131814
35	.0002041	.0003559	.0006058	.0010068	.0016343	.0025917	.0040491	.0061783
36	.0000685	.0001237	.0002188	.0003779	.0006379	.0010530	.0017009	.0026901
37	.0000210	.0000396	.0000729	.0001308	.0002285	.0003934	.0006397	.0010829
38	.0000060	.0000117	.0000213	.0000417	.0000759	.0001382	.0002354	.0004012
39	.0000015	.0000031	.0000063	.0000129	.0000230	.0000426	.0000779	.0001364
40	.0000004	.0000008	.0000016	.0000032	.0000064	.0000122	.0000236	.0000443
41	.0000001	.0000002	.0000004	.0000008	.0000016	.0000032	.0000062	.0000119
42			.0000001	.0000002	.0000004	.0000008	.0000015	.0000030
43					.0000001	.0000002	.0000003	.0000007
44						.0000001	.0000001	.0000001
$n \backslash p$	.49	.50						
1	1.00000000	1.00000000						
2	1.00000000	1.00000000						
3	1.00000000	1.00000000						
4	1.00000000	1.00000000						
5	1.00000000	1.00000000						
6	1.00000000	1.00000000						
7	1.00000000	1.00000000						
8	1.00000000	1.00000000						
9	.99999999	.99999999						
10	.99999998	.99999994						
11	.99999996	.99999972						
12	.99999979	.99999888						
13	.99999761	.99999591						
14	.99997481	.9998657						
15	.9993327	.9995986						
16	.9982450	.9989049						
17	.9967630	.9972368						
18	.9950798	.9954698						
19	.9932992	.9934958						
20	.9914883	.9913806						
21	.9896178	.9890817						
22	.9876895	.9875111						
23	.9857185	.9864160						
24	.9837241	.9849486						
25	.9817177	.9834339						
26	.9797078	.9818768						
27	.9776908	.9800000						
28	.9756729	.9789232						
29	.9736507	.9771561						
30	.9716205	.9750514						
31	.9695816	.9730396						
32	.9675341	.9710289						
33	.9654839	.9691853						
34	.9634368	.9671794						
35	.9613803	.965042						
36	.9593188	.9633302						
37	.9572541	.9613439						
38	.9551898	.959351						
39	.9531263	.9574612						
40	.9510628	.955343						
41	.9490023	.9530409						
42	.9469459	.9510812						
43	.9448914	.9491288						
44	.9428383	.9471794						
45	.9407861	.9451241						

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$$P(c_1, c_2, p) = \sum_{n=0}^{\infty} \left(\frac{c_1}{c_2} \right)^n (1-p)^{n-1}$$

	.01	.02	.03	.04	.05	.06	.07	.08
1	.4846453	.6708195	.8127398	.8940947	.9404614	.9667316	.9815354	.990063
2	.1050037	.3013311	.4948045	.6513950	.7681130	.8499383	.9050473	.9410540
3	.0178288	.0977355	.2282111	.3783578	.5231968	.6486562	.7496231	.8265820
4	.0022783	.0243302	.0628745	.1773721	.2954677	.4216784	.5429478	.6507519
5	.0002395	.0048554	.0244402	.0685048	.1596510	.2333352	.3407172	.4519760
6	.0000190	.0008014	.0060063	.0222362	.0560051	.1107114	.1854562	.2756705
7	.0000013	.0001120	.0012553	.0061708	.0193175	.0454806	.0880703	.1479129
8	.0000001	.0000135	.0002267	.0014850	.0058010	.0163434	.0367595	.0701474
9		.0000014	.0000358	.0003136	.0015326	.0051821	.0135868	.0295741
10		.0000001	.0000050	.0000357	.0003594	.0014517	.0044794	.0111495
11			.0000006	.0000098	.0000754	.0003694	.0013247	.0037797
12			.0000001	.0000015	.0000142	.0000841	.0003536	.0011580
13				.0000002	.0000024	.0000174	.0000856	.0003221
14					.0000004	.0000033	.0000189	.0000817
15					.0000001	.0000006	.0000038	.0000189
16						.0000001	.0000007	.0000040
17							.0000001	.0000003
18								.0000001
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$$P(e, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 55

	.25	.26	.27	.28	.29	.30	.31	.32
10	.9111874	.9347781	.9529420	.9666349	.9767484	.9840710	.9892713	.9928947
11	.8446198	.8609181	.8710355	.8770006	.8781890	.8755098	.8758457	.8633337
12	.7510458	.7635025	.7685918	.7681305	.761636	.751877	.7511703	.7364927
13	.6438999	.6537690	.6585322	.6565931	.6477784	.6322701	.6105314	.5831674
14	.5205740	.5287825	.5316339	.5274891	.5134940	.4900903	.4501146	.4037310
15	.3982498	.4056907	.4129997	.4193678	.4242161	.4272876	.4286967	.4139386
16	.2867901	.2936110	.3007555	.3071869	.3129132	.3179578	.3223140	.3241663
17	.1959217	.2025306	.2092867	.2161167	.2229444	.2297992	.2366145	.2424145
18	.1280985	.1342327	.1400965	.1456957	.1510492	.1561797	.1610145	.1655821
19	.0729193	.0786162	.0840308	.0891731	.0940417	.0986493	.1030169	.1071663
20	.0404766	.0458457	.0517130	.0570809	.0629492	.0683193	.0732145	.0776519
21	.0210110	.0231795	.0254041	.0276810	.0300171	.0324171	.0348850	.0374145
22	.0101968	.0116181	.0131676	.0148498	.0166698	.0186344	.0207503	.0230228
23	.0046254	.0057040	.0068401	.0080374	.0093000	.0106339	.0121445	.0138382
24	.0019614	.0023102	.0027670	.0033451	.0040493	.0048863	.0058633	.0069871
25	.0007773	.0009420	.001184	.0014746	.0018195	.0022241	.0027045	.0032686
26	.0002878	.0003559	.0004285	.0005061	.0005982	.0007054	.0008385	.0009985
27	.0000926	.0001121	.0001382	.0001723	.0002140	.0002640	.0003230	.0003915
28	.0000122	.0000167	.0000214	.0000274	.0000340	.0000414	.0000497	.0000590
29	.0000047	.0000065	.0000087	.0000113	.0000144	.0000180	.0000221	.0000268
30	.0000017	.0000027	.0000045	.0000061	.0000084	.0000114	.0000150	.0000193
31	.0000007	.0000011	.0000018	.0000025	.0000036	.0000050	.0000067	.0000088
32	.0000003	.0000005	.0000008	.0000012	.0000017	.0000024	.0000033	.0000044
33	.0000001	.0000001	.0000002	.0000003	.0000005	.0000007	.0000010	.0000014
34			.0000001	.0000002	.0000003	.0000005	.0000007	.0000010
35				.0000001	.0000002	.0000003	.0000005	.0000007
36					.0000001	.0000002	.0000003	.0000004
37						.0000001	.0000002	.0000003
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$$P(r, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 55

X	.41	.42	.43	.44	.45	.46	.47	.48
21	.7107938	.7599345	.8039650	.8425844	.8757472	.9036398	.9265638	.9450861
22	.6101930	.6466179	.6792901	.7074097	.7304392	.7481066	.7613876	.7707479
23	.5021517	.5281851	.5485702	.5631282	.5728597	.5780154	.5807057	.5813125
24	.3944289	.4136816	.4271778	.4352197	.4380185	.4365676	.4318206	.4247451
25	.2946180	.3089195	.3182405	.3225429	.3225429	.3182405	.3089195	.2946180
26	.2086114	.2185504	.2237021	.2247782	.2225429	.2185504	.2185504	.2086114
27	.1396491	.1452516	.1471889	.1452516	.1396491	.1271607	.1160368	.1065279
28	.0881764	.0915191	.0927992	.0915191	.0881764	.0752680	.0629222	.0512806
29	.0524071	.0530850	.0527871	.0512531	.0474116	.0391558	.0316719	.0252170
30	.0292648	.0281052	.0258216	.0224640	.0178721	.0128032	.0080351	.0034722
31	.0153271	.0122745	.0085519	.0044014	.0019928	.0007935	.0002963	.0001133
32	.0075162	.0041361	.0016707	.0004818	.0001393	.0000244	.0000084	.0000027
33	.0034453	.0013955	.0004258	.0001337	.0000414	.0000125	.0000036	.0000011
34	.0014736	.0004978	.0001609	.0000506	.0000156	.0000040	.0000011	.0000003
35	.0005870	.0001923	.0000636	.0000213	.0000071	.0000019	.0000005	.0000001
36	.0002174	.0000719	.0000246	.0000085	.0000028	.0000007	.0000002	.0000000
37	.0000746	.0000246	.0000085	.0000028	.0000009	.0000003	.0000001	.0000000
38	.0000237	.0000075	.0000025	.0000008	.0000003	.0000001	.0000000	.0000000
39	.0000070	.0000023	.0000007	.0000002	.0000001	.0000000	.0000000	.0000000
40	.0000019	.0000006	.0000002	.0000001	.0000000	.0000000	.0000000	.0000000
41	.0000005	.0000002	.0000001	.0000000	.0000000	.0000000	.0000000	.0000000
42	.0000001	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
43			.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
44				.0000000	.0000000	.0000000	.0000000	.0000000
45					.0000000	.0000000	.0000000	.0000000

X	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
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8	1.0000000	1.0000000
9	.9999999	1.0000000
10	.9999995	.9999998
11	.9999979	.9999990
12	.9999916	.9999957
13	.9999692	.9999835
14	.9998980	.9999432
15	.9996929	.9998224
16	.9991543	.9994921
17	.9978606	.9986664
18	.9950089	.9967721
19	.9892249	.9927731
20	.9784030	.9849855
21	.9596876	.9709679
22	.9297183	.9476053
23	.8852185	.9114993
24	.8238748	.8596951
25	.7452907	.7906429
26	.6516678	.7049733
27	.5478776	.6061469
28	.4407711	.5000000
29	.3378647	.3938531
30	.2458126	.2950267
31	.1691627	.2093771
32	.1097723	.1403049
33	.0669763	.0885007
34	.0383185	.0523947
35	.0208024	.0290321
36	.0102320	.0150148
37	.0047499	.0072269
38	.0020453	.0032279
39	.0008143	.0013336
40	.0002987	.0005079
41	.0001006	.0001776
42	.0000310	.0000568
43	.0000087	.0000165
44	.0000023	.0000043
45	.0000005	.0000010
46	.0000001	.0000002

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 56

	.01	.02	.03	.04	.05	.06	.07	.08
1	.4303988	.6774031	.8183576	.8983309	.9434384	.9687277	.9828191	.9906218
2	.1082001	.3087209	.5037606	.6611029	.7767304	.8559459	.9104008	.9449542
3	.0187015	.1018074	.2561909	.3827793	.5354426	.6607331	.7605028	.8357490
4	.0024279	.0087983	.0267346	.0654115	.1306854	.2435271	.3557451	.4668191
5	.0002499	.0052449	.0261932	.0728595	.1474437	.2446358	.3548733	.4678761
6	.0000212	.0008825	.0063593	.0240870	.0601875	.1180692	.1963245	.2897750
7	.0000015	.0001258	.0013978	.0081134	.0211519	.0494001	.0948873	.1581335
8	.0000001	.0000154	.0002576	.0016724	.0064768	.0180920	.0403512	.0763686
9		.0000017	.0000416	.0003604	.0017460	.0058518	.0152009	.0328200
10		.0000002	.0000059	.0000689	.0004181	.0016850	.0051160	.0126235
11			.0000008	.0000118	.0000896	.0004349	.0015454	.0043692
12			.0000001	.0000001	.0000018	.0000173	.0000421	.0001367
13				.0000003	.0000003	.0000030	.0000214	.0000890
14					.0000005	.0000041	.0000235	.0001009
15					.0000001	.0000007	.0000049	.0000240
16						.0000001	.0000009	.0000052
17							.0000002	.0000010
18								.0000002
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$$F(n, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 57

	.41	.42	.43	.44	.45	.46	.47	.48
17	.9698131	.9787608	.9853355	.9906665	.9934003	.9957006	.9973545	.9982221
18	.9448995	.9598205	.9712430	.9798042	.9860864	.9905995	.9937733	.9959578
19	.9064266	.9291418	.9476182	.9618856	.9727883	.9809431	.9869131	.9911904
20	.8515486	.8840186	.9110356	.9329874	.9504553	.9640585	.9744257	.9821573
21	.7790911	.8217076	.8586007	.8898461	.9157375	.9367305	.9533857	.9663145
22	.6903759	.7421820	.7889064	.8301234	.8656898	.8957144	.9205118	.9405483
23	.5894948	.6479470	.7028724	.7533170	.7986838	.8385404	.8730080	.9016277
24	.4888152	.5441065	.6041072	.6615272	.7152573	.7644261	.8084734	.8469590
25	.3777989	.4375797	.4985554	.5593542	.6185585	.6749855	.7275608	.7734678
26	.2614573	.3357547	.3934481	.4533454	.5141237	.5744147	.6328928	.6883586
27	.1990633	.2450035	.2945866	.3504507	.4089586	.4689728	.5295493	.5893943
28	.1333840	.1655314	.2113317	.2583886	.3101672	.3658452	.4243885	.4845091
29	.0643777	.1110110	.1430112	.1805506	.2235643	.2717208	.3244136	.3807764
30	.0503641	.0666197	.0914711	.1193922	.1527074	.1915407	.2357744	.2850231
31	.0283033	.0392690	.0551820	.0745427	.0985985	.1277926	.1624100	.2025281
32	.0149511	.0218989	.0313385	.0438507	.0600400	.0804957	.1057458	.1362045
33	.0074121	.0112672	.0167238	.0242572	.0344073	.0477600	.0644981	.0864618
34	.0034433	.0054348	.0083715	.0125944	.0185193	.0266343	.0374896	.0516766
35	.0014964	.0024535	.0039238	.0061259	.0093433	.0139313	.0203302	.0290112
36	.0006074	.0010348	.0017189	.0027861	.0044097	.0068203	.0103147	.0152626
37	.0002298	.0004076	.0006971	.0011823	.0019429	.0031185	.0048924	.0075069
38	.0000809	.0001490	.0002671	.0004673	.0007974	.0013127	.0021633	.0034436
39	.0000264	.0000506	.0000944	.0001716	.0003042	.0005263	.0008895	.0014696
40	.0000060	.0000159	.0000309	.0000584	.0001075	.0001933	.0003392	.0005818
41	.0000022	.0000046	.0000093	.0000164	.0000351	.0000656	.0001196	.0002131
42	.0000006	.0000012	.0000026	.0000053	.0000106	.0000205	.0000389	.0000719
43	.0000001	.0000003	.0000009	.0000014	.0000029	.0000059	.0000116	.0000233
44		.0000001	.0000002	.0000003	.0000007	.0000015	.0000032	.0000063
45				.0000001	.0000002	.0000004	.0000008	.0000016
46						.0000001	.0000002	.0000004
47							.0000002	.0000001

	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
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7	1.0000000	1.0000000
8	1.0000000	1.0000000
9	1.0000000	1.0000000
10	.9999999	.9999999
11	.9999992	.9999996
12	.9999987	.9999983
13	.9999973	.9999964
14	.9999951	.9999934
15	.9999918	.9999891
16	.9999871	.9999822
17	.9999809	.9999738
18	.9999732	.9999642
19	.9999642	.9999539
20	.9999539	.9999425
21	.9761335	.9834280
22	.9561861	.9686317
23	.9253395	.9444194
24	.8799474	.9074718
25	.8181637	.8553781
26	.7398074	.7864786
27	.6471508	.7016791
28	.5449392	.6043168
29	.4397214	.5000000
30	.3386298	.3956032
31	.2479777	.2983209
32	.1721189	.2155214
33	.1129007	.1446219
34	.0697977	.0924252
35	.0406653	.0555806
36	.0221087	.0311683
37	.0118720	.0165720
38	.0053627	.0081741
39	.0023744	.0037541
40	.0009757	.0016008
41	.0003710	.0006318
42	.0001301	.0002300
43	.0000419	.0000769
44	.0000123	.0000236
45	.0000033	.0000066
46	.0000008	.0000017
47	.0000002	.0000004
48		.0000001

$$f(x, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 50

	.01	.02	.03	.04	.05	.06	.07	.08
1	.4417339	.6901779	.8290927	.9067017	.9489531	.9723670	.9851403	.9928623
2	.1146689	.3234497	.5325167	.6790643	.7931258	.8700299	.9202697	.9520388
3	.0205136	.1101486	.2532874	.4109698	.5593849	.6819747	.7811089	.8520152
4	.0027606	.0288911	.0962787	.2018297	.3297447	.4622448	.5855867	.6917720
5	.0002949	.0060842	.0229348	.0620093	.1635577	.3676404	.6332310	.8492222
6	.0000259	.0010635	.0077746	.0280908	.0690935	.1334879	.2187369	.3183980
7	.0000019	.0001575	.0017208	.0084857	.0231760	.0578488	.1093764	.1794935
8	.0000001	.0000201	.0003396	.0021031	.0008052	.0029834	.0082161	.0187709
9		.0000022	.0000554	.0004715	.0002340	.0007389	.0186729	.0400323
10		.0000002	.0000082	.0000938	.0005594	.0022140	.0066027	.0160044
11			.0000011	.0000017	.0001249	.0005954	.0020773	.0057664
12			.0000001	.0000027	.0000252	.0001446	.0005909	.0018916
13				.0000004	.0000046	.0000319	.0001527	.0005585
14				.0000001	.0000008	.0000064	.0000360	.0001514
15					.0000001	.0000012	.0000078	.0000376
16						.0000002	.0000015	.0000086
17							.0000003	.0000018
18								.0000004
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$$10 \log_{10} \left(\sum_{n=0}^{\infty} \left(\frac{1}{2} \right)^n (1 - \frac{1}{2})^{n-1} \right)^{n-1}$$

n = 50

	.25	.26	.27	.28	.29	.30	.31	.32
1	.9876150	.9919977	.9949187	.9968285	.9980538	.9988254	.9993033	.9995935
2	.9710512	.9804113	.9869822	.9915017	.9945489	.9965640	.9978714	.9987038
3	.9403776	.9577955	.9706743	.9799932	.9865957	.9911708	.9942971	.9963779
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11	.8902772	.9188558	.9411191	.9580631	.9706780	.9798700	.9864291	.9910147
12	.8174040	.8591627	.8934185	.9208485	.9423074	.9587210	.9710038	.9800014
13	.7288640	.7770133	.8243179	.8641650	.8969210	.9230208	.9430404	.9579024
14	.6100476	.6748817	.7338888	.7861648	.8313248	.8691855	.9007095	.9259014
15	.4899138	.5595400	.6263694	.6806644	.7245849	.7592246	.7851958	.8047717
16	.3722557	.4406658	.5097848	.5774418	.6420289	.7019937	.7568788	.8041975
17	.2669415	.3284170	.3937793	.4611987	.5297587	.5946117	.6571160	.7147194
18	.1802181	.2309805	.2870306	.3475142	.4144624	.4809131	.5470544	.6111653
19	.1143681	.1530081	.1988725	.2505837	.3081236	.3697816	.4344330	.4999308
20	.0681515	.0953224	.1300700	.1695681	.2166870	.2697780	.3286917	.3897283
21	.0381144	.0558041	.0789440	.1081663	.1433851	.1860881	.2345607	.2886619
22	.0199972	.0306793	.0453953	.0649476	.0900102	.1211052	.1586846	.2034886
23	.0096404	.0158326	.0245266	.0366743	.0530537	.0744045	.1013530	.1333148
24	.0045412	.0076679	.0124454	.0194668	.0294140	.0430836	.0610166	.0841145
25	.0019688	.0034844	.0059389	.0092708	.0135379	.0203410	.0304716	.0449614
26	.0007974	.0014854	.0026511	.0045466	.0075110	.0112790	.0164816	.0247636
27	.0003034	.0005932	.0011173	.0019920	.0034559	.0057607	.0084281	.0124452
28	.0001082	.0002227	.0004378	.0008240	.0014979	.0026623	.0043774	.0071806
29	.0000362	.0000783	.0001616	.0003173	.0006052	.0011015	.0019398	.0032934
30	.0000113	.0000258	.0000559	.0001119	.0002301	.0004391	.0008068	.0014304
31	.0000033	.0000060	.0000181	.0000394	.0000880	.0001638	.0003148	.0005830
32	.0000009	.0000023	.0000055	.0000128	.0000287	.0000571	.0001151	.0002428
33	.0000003	.0000006	.0000016	.0000037	.0000086	.0000179	.0000394	.0000797
34	.0000001	.0000002	.0000004	.0000010	.0000025	.0000057	.0000126	.0000267
35			.0000001	.0000003	.0000007	.0000016	.0000030	.0000084
36				.0000001	.0000003	.0000004	.0000011	.0000024
37					.0000001	.0000001	.0000003	.0000007
38						.0000001	.0000001	.0000002
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$$f(x, y, z) = \sum_{n=0}^{\infty} \sum_{m=0}^{\infty} \sum_{k=0}^{\infty} p_{n,m,k} x^n y^m z^k$$

h = 10

	.41	.42	.43	.44	.45	.46	.47	.48
16	.9880194	.9900031	.9947631	.9966375	.9978834	.9986943	.9992100	.9995180
17	.9759078	.9833157	.9886662	.9924474	.9950632	.9968487	.9980195	.9987038
18	.9651141	.9727754	.9773081	.9814196	.9853776	.9892460	.9934095	.9970735
19	.9548200	.9614888	.9657769	.9697699	.9737785	.9785380	.9831374	.9874788
20	.9440406	.9503659	.9546766	.9587027	.9625051	.9671025	.9718248	.9764938
21	.9338787	.9397866	.9447147	.9490883	.9531360	.9579314	.9632745	.9673919
22	.9238749	.9294827	.9347550	.9396401	.9442113	.9485010	.9539625	.9589161
23	.9138761	.9194861	.9247561	.9296700	.9342113	.9385010	.9439625	.9489161
24	.9038761	.9094861	.9147561	.9196700	.9242113	.9285010	.9339625	.9389161
25	.8938761	.8994861	.9047561	.9096700	.9142113	.9185010	.9239625	.9289161
26	.8838761	.8894861	.8947561	.8996700	.9042113	.9085010	.9139625	.9189161
27	.8738761	.8794861	.8847561	.8896700	.8942113	.8985010	.9039625	.9089161
28	.8638761	.8694861	.8747561	.8796700	.8842113	.8885010	.8939625	.8989161
29	.8538761	.8594861	.8647561	.8696700	.8742113	.8785010	.8839625	.8889161
30	.8438761	.8494861	.8547561	.8596700	.8642113	.8685010	.8739625	.8789161
31	.8338761	.8394861	.8447561	.8496700	.8542113	.8585010	.8639625	.8689161
32	.8238761	.8294861	.8347561	.8396700	.8442113	.8485010	.8539625	.8589161
33	.8138761	.8194861	.8247561	.8296700	.8342113	.8385010	.8439625	.8489161
34	.8038761	.8094861	.8147561	.8196700	.8242113	.8285010	.8339625	.8389161
35	.7938761	.7994861	.8047561	.8096700	.8142113	.8185010	.8239625	.8289161
36	.7838761	.7894861	.7947561	.7996700	.8042113	.8085010	.8139625	.8189161
37	.7738761	.7794861	.7847561	.7896700	.7942113	.7985010	.8039625	.8089161
38	.7638761	.7694861	.7747561	.7796700	.7842113	.7885010	.7939625	.7989161
39	.7538761	.7594861	.7647561	.7696700	.7742113	.7785010	.7839625	.7889161
40	.7438761	.7494861	.7547561	.7596700	.7642113	.7685010	.7739625	.7789161
41	.7338761	.7394861	.7447561	.7496700	.7542113	.7585010	.7639625	.7689161
42	.7238761	.7294861	.7347561	.7396700	.7442113	.7485010	.7539625	.7589161
43	.7138761	.7194861	.7247561	.7296700	.7342113	.7385010	.7439625	.7489161
44	.7038761	.7094861	.7147561	.7196700	.7242113	.7285010	.7339625	.7389161
45	.6938761	.6994861	.7047561	.7096700	.7142113	.7185010	.7239625	.7289161
46	.6838761	.6894861	.6947561	.6996700	.7042113	.7085010	.7139625	.7189161
47	.6738761	.6794861	.6847561	.6896700	.6942113	.6985010	.7039625	.7089161

	.49	.50
1	1.0000000	1.0000000
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$$E(x,y) = \sum_{n=0}^{\infty} \frac{(-1)^n}{n!} \left(\frac{\partial}{\partial x} \right)^n \left(\frac{\partial}{\partial y} \right)^n e^{-x-y}$$

$x \backslash y$.01	.02	.03	.04	.05	.06	.07	.08
1	.4473165	.6663743	.8148129	.9100497	.9515055	.9740257	.9861804	.9966973
2	.1179395	.3307843	.5317140	.6809218	.8009172	.8762077	.9248097	.9558114
3	.0214553	.1344146	.2603943	.4217256	.5710780	.6955140	.7908501	.8607833
4	.0029382	.0305162	.0609500	.1101253	.1718271	.2455460	.3292733	.4065562
5	.0003194	.0065458	.0119382	.0206806	.0330167	.0495466	.0692767	.0926584
6	.0000206	.0011840	.0004394	.0001476	.0000467	.0000137	.0000035	.0000009
7	.0000022	.0000176	.0000091	.0000039	.0000019	.0000007	.0000002	.0000000
8	.0000001	.0000008	.0000003	.0000001	.0000000	.0000000	.0000000	.0000000
9		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
10			.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
11				.0000001	.0000000	.0000000	.0000000	.0000000
12					.0000000	.0000000	.0000000	.0000000
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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 59

x	.41	.42	.43	.44	.45	.46	.47	.48
14	.9982700	.9989460	.9993704	.9996313	.9997884	.9998811	.9999345	.9999647
15	.9958089	.9973481	.9983547	.9989995	.9994038	.9996519	.9998010	.9998884
16	.9906783	.9938767	.9960562	.9975102	.9984595	.9990663	.9994452	.9996779
17	.9808736	.9869640	.9912879	.9942922	.9963351	.9976844	.9985794	.9991430
18	.9636395	.9743023	.9821090	.9878967	.9919384	.9947385	.9966362	.9978942
19	.9335951	.9529085	.9661730	.9761718	.9835448	.9888631	.9926153	.9952043
20	.8937909	.9194782	.9401007	.9562923	.9687254	.9780628	.9849208	.9898463
21	.8355511	.8710619	.9007636	.9250530	.9444756	.9596624	.9712740	.9799547
22	.7603894	.8059504	.8456523	.8794692	.9076284	.9305528	.9487992	.9629975
23	.6701722	.7245099	.7738405	.8176055	.8555551	.8877215	.9143737	.9359610
24	.5693177	.6226385	.6856913	.7394113	.7870160	.8290267	.8652630	.8958131
25	.4641898	.5265885	.5880751	.6472539	.7028990	.7540278	.7999365	.8408237
26	.3619127	.4221171	.4839226	.5458807	.6065485	.6645847	.7188330	.7683951
27	.2697000	.3281879	.3881756	.4477225	.5034593	.5549486	.6027992	.6466886
28	.1900299	.2363100	.2844401	.3416976	.4003701	.4612123	.5238426	.5838347
29	.1273366	.1631682	.2047634	.2518793	.3039751	.3602203	.4195301	.4806253
30	.0807654	.1070771	.1388983	.1764408	.2196672	.2682570	.3215949	.3787847
31	.0484024	.0664594	.0892105	.1171677	.1506880	.1899179	.2347467	.2847780
32	.0273638	.0380432	.0514451	.0673005	.0859916	.1074899	.1326992	.1616886
33	.0143713	.0215100	.0309989	.0436482	.0600942	.0809958	.1067944	.1380350
34	.0072979	.0111806	.0167124	.0243930	.0347918	.0485266	.0662323	.0885166
35	.0034327	.0054607	.0084708	.0126238	.0189609	.0274003	.0387257	.0535624
36	.0015142	.0025021	.0040298	.0063309	.0097090	.0145457	.0213023	.0305157
37	.0006254	.0010739	.0017964	.0029298	.0046626	.0072455	.0110018	.0163331
38	.0002414	.0004309	.0007490	.0012687	.0020960	.0033799	.0053236	.0081951
39	.0000870	.0001614	.0002915	.0005130	.0008802	.0014734	.0024084	.0038460
40	.0000292	.0000563	.0001057	.0001933	.0003446	.0005990	.0010163	.0016843
41	.0000091	.0000183	.0000356	.0000677	.0001254	.0002265	.0003991	.0006867
42	.0000026	.0000055	.0000111	.0000220	.0000424	.0000793	.0001455	.0002599
43	.0000007	.0000015	.0000032	.0000066	.0000132	.0000258	.0000491	.0000910
44	.0000002	.0000004	.0000009	.0000019	.0000038	.0000077	.0000153	.0000294
45		.0000001	.0000002	.0000005	.0000010	.0000021	.0000044	.0000087
46				.0000001	.0000002	.0000005	.0000011	.0000024
47					.0000001	.0000001	.0000003	.0000006
48						.0000001	.0000001	.0000001

x	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	.99999999	1.00000000
11	.99999997	.99999999
12	.99999987	.99999994
13	.99999948	.99999974
14	.99999814	.99999904
15	.99999390	.99999673
16	.9998169	.99989921
17	.9994941	.99970781
18	.9987096	.9992264
19	.9969511	.9981031
20	.9933051	.9956793
21	.9862990	.9908315
22	.9737981	.9818284
23	.9530523	.9662777
24	.9209875	.9413613
25	.8747761	.9037368
26	.8126175	.8512034
27	.7345208	.7825036
28	.6428124	.6985344
29	.5431131	.6025782
30	.4386903	.5000000
31	.3293233	.3974218
32	.2500124	.3014616
33	.1749209	.2174964
34	.1159079	.1487976
35	.0735434	.0962032
36	.0427835	.0587387
37	.0237215	.0337223
38	.0123369	.0181716
39	.0060043	.0091685
40	.0027281	.0043207
41	.0011543	.0018969
42	.0004535	.0007736
43	.0001650	.0002922
44	.0000554	.0001019
45	.0000171	.0000327
46	.0000048	.0000096
47	.0000012	.0000026
48	.0000003	.0000006
49	.0000001	.0000001

$$P(x, n, p) = \sum_{i=0}^n \binom{n}{i} p^i (1-p)^{n-i}$$

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n = 60

	.01	.02	.03	.04	.05	.06	.07	.08
1	.4538434	.7024469	.8391933	.9136477	.9539302	.9755842	.9871478	.9932815
2	.1231233	.3380961	.5407892	.6977665	.8084466	.8820760	.9291057	.9582287
3	.0234202	.1187430	.2685339	.4324134	.5825642	.7060044	.8002272	.8663106
4	.0031233	.0321944	.1057121	.2186565	.3527190	.4997235	.6126837	.7171439
5	.0003458	.0070246	.0319962	.0917383	.1803351	.2910905	.4115280	.5298296
6	.0000315	.0012716	.0009144	.0325098	.0787193	.1498039	.2419517	.3473999
7	.0000024	.0001554	.0002093	.0098878	.0296941	.0671361	.1249501	.2019856
8	.0000002	.0000025	.0004172	.0026164	.0097891	.0264305	.0570137	.1044407
9		.0000030	.0000728	.0006092	.0028486	.0092171	.0231368	.0482463
10		.0000003	.0000113	.0001260	.0007380	.0028690	.0084042	.0200134
11			.0000016	.0000233	.0001715	.0008024	.0027488	.0074927
12			.0000002	.0000039	.0000360	.0002029	.0008139	.0025438
13				.0000006	.0000068	.0000466	.0002192	.0007866
14				.0000001	.0000012	.0000098	.0000539	.0002224
15					.0000002	.0000019	.0000122	.0000577
16						.0000003	.0000025	.0000138
17						.0000001	.0000005	.0000030
18							.0000001	.0000006
19								.0000001
20								
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$$P(r, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 60

λp	.41	.42	.43	.44	.45	.46	.47	.48
13	.9995237	.9997253	.9998447	.9999140	.9999533	.9999752	.9999871	.9999934
14	.9997119	.9998200	.9999465	.9999739	.9999858	.9999918	.9999956	.9999978
15	.9998180	.9999192	.9999795	.9999927	.9999976	.9999993	.9999998	.9999999
16	.9999219	.9999514	.9999704	.9999815	.9999884	.9999937	.9999961	.9999979
17	.9999835	.9999867	.9999933	.9999961	.9999979	.9999988	.9999993	.9999996
18	.9999955	.9999962	.9999981	.9999987	.9999991	.9999994	.9999996	.9999997
19	.9999983	.9999989	.9999993	.9999995	.9999996	.9999997	.9999998	.9999998
20	.9999997	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
21	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
22	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
23	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
24	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
25	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
26	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
27	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
28	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
29	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
30	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
31	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
32	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
33	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
34	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
35	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
36	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
37	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
38	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
39	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
40	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
41	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
42	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
43	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
44	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
45	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
46	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
47	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
48	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
49	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999

λp	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	1.0000000	1.0000000
8	1.0000000	1.0000000
9	1.0000000	1.0000000
10	1.0000000	1.0000000
11	.9999999	.9999999
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43	.9999999	.9999999
44	.9999999	.9999999
45	.9999999	.9999999
46	.9999999	.9999999
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48	.9999999	.9999999
49	.9999999	.9999999
50	.9999999	.9999999

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 61

x	.41	.42	.43	.44	.45	.46	.47	.48
12	.9999858	.9999377	.9999667	.9999825	.9999910	.9999955	.9999978	.9999989
13	.9999653	.9998034	.9998907	.9999405	.9999683	.9999834	.9999918	.9999958
14	.9999047	.9994369	.9996747	.9998140	.9998980	.9999447	.9999707	.9999848
15	.9975045	.9985869	.9991151	.9994805	.9997011	.9998316	.9999072	.9999499
16	.9944367	.9964622	.9977957	.9986547	.9991960	.9995296	.9997307	.9998492
17	.9881277	.9921636	.9949320	.9967893	.9980081	.9987902	.9992809	.9995810
18	.9765226	.9839240	.9892133	.9929096	.9954153	.9971228	.9982249	.9989266
19	.9568091	.9693390	.9786678	.9854579	.9902847	.9936507	.9959360	.9974546
20	.9258057	.9454364	.9606635	.9722075	.9807616	.9869569	.9913421	.9943752
21	.8805617	.9090881	.9321409	.9503443	.9643908	.9749826	.9827871	.9884061
22	.8191774	.8576990	.8901314	.9168059	.9382349	.9550676	.9679754	.9764855
23	.7416195	.7900395	.8325107	.8688938	.8993378	.9242228	.9440937	.9595938
24	.6502303	.7069612	.7588037	.8050606	.8453669	.8796692	.9081831	.9313342
25	.5496763	.6117078	.6707648	.7256491	.7754800	.8195748	.8577613	.8900318
26	.4462591	.5096223	.5724701	.6333049	.6907070	.7438160	.7915851	.8336063
27	.3467521	.4072661	.4697979	.5328425	.5946751	.6544570	.7103296	.7614086
28	.2571146	.3111845	.3693940	.4305197	.4931504	.5557821	.6169227	.6751934
29	.1814762	.2266990	.2774199	.3328954	.3920862	.4537136	.5163404	.5784678
30	.1216639	.1570814	.1984650	.2456106	.2979919	.3547737	.4148418	.4768671
31	.0773285	.1033078	.1349332	.1724576	.2158733	.2640728	.3188331	.3768294
32	.0465191	.0643682	.0877005	.1149803	.1486854	.1882905	.2336933	.2844869
33	.0264473	.0379330	.0531085	.0726421	.0971492	.1271310	.1629109	.2045751
34	.0141898	.0211106	.0306369	.0434085	.0600942	.0813472	.1077459	.1397516
35	.0071751	.0110746	.0166763	.0244927	.0351267	.0492287	.0674659	.0904740
36	.0034146	.0054744	.0085518	.0130274	.0193679	.0281223	.0399077	.0553840
37	.0015273	.0025436	.0041253	.0065213	.0100560	.0151370	.0223577	.0319907
38	.0006411	.0011095	.0018690	.0030673	.0049081	.0076630	.0116822	.0174003
39	.0002822	.0004537	.0007940	.0013533	.0022479	.0036419	.0055759	.0080841
40	.0000928	.0001736	.0003158	.0005591	.0009644	.0016219	.0026613	.0042635
41	.00000319	.0000620	.0001173	.0002158	.0003867	.0006754	.0011504	.0019126
42	.00000102	.0000207	.0000406	.0000777	.0001447	.0002625	.0004642	.0008011
43	.00000030	.0000064	.0000131	.0000260	.0000504	.0000949	.0001744	.0003125
44	.00000008	.0000018	.0000039	.0000081	.0000163	.0000319	.0000609	.0001133
45	.00000002	.0000005	.0000011	.0000023	.0000049	.0000099	.0000197	.0000380
46	.00000001	.0000001	.0000003	.0000006	.0000013	.0000028	.0000059	.0000118
47			.0000001	.0000002	.0000003	.0000008	.0000016	.0000034
48					.0000001	.0000002	.0000004	.0000009
49							.0000001	.0000002

x	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	.99999999	1.00000000
12	.99999995	.99999998
13	.99999979	.99999990
14	.99999923	.99999962
15	.99999736	.99999864
16	.99999174	.99999558
17	.99997622	.99998679
18	.99993675	.99996350
19	.99984406	.99990659
20	.99964250	.99977780
21	.99923582	.99950733
22	.99847297	.99879266
23	.99714036	.99701915
24	.99496932	.99391113
25	.99166666	.99381343
26	.98697040	.98999843
27	.98072286	.98471613
28	.97294185	.97786870
29	.96386397	.96553396
30	.95393907	.96009237
31	.94376767	.95000000
32	.93399515	.93990763
33	.92519270	.93044604
34	.91776056	.92131130
35	.91188000	.9128387
36	.90782147	.9000157
37	.90449708	.8918657
38	.90153371	.88360887
39	.90134232	.87598085
40	.90066726	.86809074
41	.90031054	.86092267
42	.90013499	.85432220
43	.90005467	.84819341
44	.90000058	.84243650
45	.90000717	.83701321
46	.90000231	.83189442
47	.90000069	.82701136
48	.90000019	.82239038
49	.90000005	.81795010
50	.90000001	.81368002

AWCP 706-109

$$F(c, n, p) = \sum_{i=c}^n \binom{n}{i} p^i (1-p)^{n-i}$$

n = 62

	.01	.02	.03	.04	.05	.06	.07	.08
1	.4633310	.7142300	.8486270	.9204177	.9504280	.9704262	.9888441	.99431135
2	.1277870	.3826454	.5585208	.7148393	.8327464	.9030490	.9370102	.9636586
3	.0244167	.1275742	.2848927	.4535625	.6049515	.7268359	.8179231	.8823464
4	.0035172	.0137042	.1156001	.3358126	.3756936	.5146409	.6366523	.7409386
5	.0004010	.0080560	.0381829	.1020307	.1977171	.3148772	.4396231	.5595677
6	.0000381	.0018045	.0106773	.0375564	.0890578	.1669611	.2658471	.3766197
7	.0000060	.0002403	.0025370	.0117561	.0347281	.0772673	.1415079	.2348668
8	.0000002	.0000031	.0000529	.0002227	.0011824	.0031462	.0066762	.1203842
9		.0000040	.0000947	.0007792	.0035751	.0113673	.0280465	.0575020
10		.0000004	.0000152	.0001671	.0009612	.0036699	.0105606	.0247096
11			.0000002	.0000022	.0002320	.0010654	.0035850	.0085966
12			.0000003	.0000056	.0000506	.0002801	.0011030	.0033841
13				.0000000	.0000019	.0000669	.0003090	.0010882
14				.0000000	.0000010	.0000166	.0000792	.0003203
15					.0000003	.0000029	.0000186	.0000866
16						.0000005	.0000040	.0000216
17						.0000001	.0000008	.0000050
18							.0000001	.0000011
19								.0000002
20								
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$$P(c, n, r) = \sum_{i=c}^n \binom{n}{i} r^i (1-r)^{n-i}$$

n = 62

$\frac{c}{n}$.25	.26	.27	.28	.29	.30	.31	.32
6	.9993695	.9996444	.9998072	.9998960	.9999448	.9999712	.9999852	.9999935
7	.9978567	.9987458	.9992788	.9995924	.9997736	.9998764	.9999336	.9999650
8	.9931827	.9962017	.9977153	.9986480	.9992141	.9995513	.9997483	.9998613
9	.9845782	.9908001	.9937197	.9961220	.9976431	.9985934	.9991757	.9995257
10	.9660841	.9771605	.9849172	.9903310	.9937929	.9961302	.9976324	.9985703
11	.9334250	.9531020	.9676225	.9780072	.9854580	.9903552	.9939574	.9962154
12	.8812542	.9131425	.9373839	.9557622	.9691645	.9792000	.9861523	.9909589
13	.8090374	.8534732	.8898511	.9186640	.9414276	.9585538	.9712491	.9804458
14	.7155343	.7720391	.8223135	.8636743	.8975398	.9248214	.9454967	.9614176
15	.6064906	.6736809	.7347010	.7885550	.8347987	.8734730	.9050019	.9300770
16	.4901561	.5621949	.6311009	.6952732	.7527935	.8034636	.8467032	.8826819
17	.3762452	.4471308	.5185422	.5802832	.6344016	.6815269	.7214494	.7546414
18	.2735020	.3377376	.4058229	.4759955	.5456571	.6131179	.6765436	.7345671
19	.1878927	.2416490	.3017308	.3665672	.4346150	.5035081	.5716313	.6363027
20	.1217906	.1634660	.2125134	.2682663	.3395620	.3949220	.4624777	.5303233
21	.0744246	.104061	.1415673	.1860006	.2373452	.2947754	.3570416	.4225608
22	.0428472	.0629045	.0890865	.1220161	.1619968	.2089254	.2623019	.3211373
23	.0212310	.0357297	.0528121	.0756435	.1046414	.1403749	.1820770	.2301884
24	.0112593	.0191246	.0296432	.0442804	.0633990	.0873739	.1209799	.1593913
25	.0056996	.0096440	.0156580	.0244607	.0360570	.0536658	.0754782	.1037230
26	.0025787	.0045808	.0077956	.0127450	.0200621	.0305026	.0448472	.0639037
27	.0010983	.0020472	.0036573	.0062613	.0103094	.0163634	.0250905	.0372374
28	.0004403	.0008633	.0016165	.0028994	.0049948	.0082839	.0132556	.0205057
29	.0001661	.0003424	.0006730	.0012652	.0023814	.0043956	.0076602	.0126634
30	.0000590	.0001279	.0002638	.0005201	.0009820	.0017807	.0031083	.0052332
31	.0000197	.0000449	.0000974	.0002013	.0003982	.0007555	.0013781	.0024232
32	.0000062	.0000149	.0000338	.0000734	.0001520	.0003019	.0005757	.0010569
33	.0000018	.0000046	.0000111	.0000252	.0000546	.0001136	.0002265	.0004344
34	.0000005	.0000014	.0000034	.0000081	.0000185	.0000402	.0000839	.0001681
35	.0000001	.0000004	.0000010	.0000025	.0000059	.0000134	.0000292	.0000612
36		.0000001	.0000003	.0000007	.0000018	.0000042	.0000096	.0000209
37			.0000001	.0000002	.0000005	.0000012	.0000029	.0000067
38				.0000001	.0000001	.0000003	.0000008	.0000020
39					.0000001	.0000001	.0000002	.0000006
40						.0000001	.0000001	.0000002
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AMCP 706-109

$$P(x, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 63

X	.01	.02	.03	.04	.05	.06	.07	.08
1	.4690945	.7109454	.8532361	.9236010	.9605009	.9797206	.9906623	.9947684
2	.1312455	.2598751	.3572734	.4330536	.4895302	.5301716	.5640443	.5911004
3	.0254544	.0730756	.1291030	.1940133	.2615012	.3236007	.3825592	.4380511
4	.0017262	.0075465	.0206066	.0454485	.0871565	.1373001	.1951203	.2595512
5	.0004341	.0016090	.0046596	.0107380	.0206615	.0346635	.0515558	.0704774
6	.0000417	.0001640	.0005075	.0013943	.0029497	.0051361	.0079014	.0112556
7	.0000034	.0000265	.0000701	.0001701	.0003446	.0005609	.0008261	.0011503
8	.0000002	.0000017	.0000053	.0000134	.0000262	.0000421	.0000610	.0000830
9		.0000004	.0000010	.0000020	.0000039	.0000062	.0000090	.0000125
10		.00000005	.0000001	.0000001	.0000002	.0000004	.0000007	.0000010
11			.00000006	.0000001	.0000002	.0000004	.0000007	.0000010
12			.00000003	.0000000	.0000000	.0000000	.0000000	.0000000
13				.0000000	.0000000	.0000000	.0000000	.0000000
14				.0000000	.0000000	.0000000	.0000000	.0000000
15				.0000000	.0000000	.0000000	.0000000	.0000000
16					.0000000	.0000000	.0000000	.0000000
17					.0000000	.0000000	.0000000	.0000000
18						.0000000	.0000000	.0000000
19						.0000000	.0000000	.0000000
20							.0000000	.0000000
21							.0000000	.0000000
22							.0000000	.0000000
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62							.0000000	.0000000
63							.0000000	.0000000

AMCP 706-109

$$P(c, n, r) = \sum_{i=c}^n \binom{n}{i} p^i (1-p)^{n-i}$$

n = 63

[illegible]

1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	.99999999	.99999999
13	.99999999	.99999999
14	.99999999	.99999999
15	.99999999	.99999999
16	.99999999	.99999999
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18	.99999999	.99999999
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25	.99999999	.99999999
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27	.99999999	.99999999
28	.99999999	.99999999
29	.99999999	.99999999
30	.99999999	.99999999
31	.99999999	.99999999
32	.99999999	.99999999
33	.99999999	.99999999
34	.99999999	.99999999
35	.99999999	.99999999
36	.99999999	.99999999
37	.99999999	.99999999
38	.99999999	.99999999
39	.99999999	.99999999
40	.99999999	.99999999
41	.99999999	.99999999
42	.99999999	.99999999
43	.99999999	.99999999
44	.99999999	.99999999
45	.99999999	.99999999
46	.99999999	.99999999

AMCP 706-109

$$P(r, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

%	.49	.50
47	.00000365	.0000585
48	.00000094	.0000189
49	.00000027	.0000056
50	.00000007	.0000015
51	.00000003	.0000004
52		.0000001

AMCP 706-109

n = 63

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

$\frac{c}{n}$	.49	.50
47	.0000305	.0000585
48	.0000094	.0000188
49	.0000027	.0000056
50	.0000007	.0000015
51	.0000002	.0000004
52		.0000001

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

$n = 64$

	.25	.26	.27	.28	.29	.30	.31	.32
4	.9999919	.9999911	.9999957	.9999979	.9999990	.9999996	.9999998	.9999999
5	.9999902	.9999907	.9999947	.9999982	.9999993	.9999996	.9999998	.9999999
6	.9999982	.9999975	.9999980	.9999970	.9999967	.9999985	.9999918	.9999980
7	.9999944	.9999924	.9999936	.9999945	.9999962	.9999960	.9999918	.9999980
8	.9999982	.9999917	.9999944	.9999926	.9999960	.9999975	.9999980	.9999918
9	.9999974	.9999924	.9999917	.9999913	.9999962	.9999911	.9999935	.9999917
10	.9999955	.9999916	.9999928	.9999965	.9999933	.9999972	.9999960	.9999920
11	.9999971	.9999954	.9999944	.9999976	.9999910	.9999960	.9999930	.9999982
12	.9999912	.9999965	.9999969	.9999960	.9999946	.9999944	.9999954	.9999968
13	.9999915	.9999916	.9999912	.9999944	.9999960	.9999910	.9999970	.9999935
14	.9999910	.9999916	.9999912	.9999944	.9999960	.9999910	.9999944	.9999972
15	.9999910	.9999916	.9999912	.9999944	.9999960	.9999910	.9999944	.9999972
16	.9999910	.9999916	.9999912	.9999944	.9999960	.9999910	.9999944	.9999972
17	.9999910	.9999916	.9999912	.9999944	.9999960	.9999910	.9999944	.9999972
18	.9999910	.9999916	.9999912	.9999944	.9999960	.9999910	.9999944	.9999972
19	.9999910	.9999916	.9999912	.9999944	.9999960	.9999910	.9999944	.9999972
20	.9999910	.9999916	.9999912	.9999944	.9999960	.9999910	.9999944	.9999972
21	.9999910	.9999916	.9999912	.9999944	.9999960	.9999910	.9999944	.9999972
22	.9999910	.9999916	.9999912	.9999944	.9999960	.9999910	.9999944	.9999972
23	.9999910	.9999916	.9999912	.9999944	.9999960	.9999910	.9999944	.9999972
24	.9999910	.9999916	.9999912	.9999944	.9999960	.9999910	.9999944	.9999972
25	.9999910	.9999916	.9999912	.9999944	.9999960	.9999910	.9999944	.9999972
26	.9999910	.9999916	.9999912	.9999944	.9999960	.9999910	.9999944	.9999972
27	.9999910	.9999916	.9999912	.9999944	.9999960	.9999910	.9999944	.9999972
28	.9999910	.9999916	.9999912	.9999944	.9999960	.9999910	.9999944	.9999972
29	.9999910	.9999916	.9999912	.9999944	.9999960	.9999910	.9999944	.9999972
30	.9999910	.9999916	.9999912	.9999944	.9999960	.9999910	.9999944	.9999972
31	.9999910	.9999916	.9999912	.9999944	.9999960	.9999910	.9999944	.9999972
32	.9999910	.9999916	.9999912	.9999944	.9999960	.9999910	.9999944	.9999972
33	.9999910	.9999916	.9999912	.9999944	.9999960	.9999910	.9999944	.9999972
34	.9999910	.9999916	.9999912	.9999944	.9999960	.9999910	.9999944	.9999972
35	.9999910	.9999916	.9999912	.9999944	.9999960	.9999910	.9999944	.9999972
36	.9999910	.9999916	.9999912	.9999944	.9999960	.9999910	.9999944	.9999972
37	.9999910	.9999916	.9999912	.9999944	.9999960	.9999910	.9999944	.9999972
38	.9999910	.9999916	.9999912	.9999944	.9999960	.9999910	.9999944	.9999972
39	.9999910	.9999916	.9999912	.9999944	.9999960	.9999910	.9999944	.9999972
40	.9999910	.9999916	.9999912	.9999944	.9999960	.9999910	.9999944	.9999972
41	.9999910	.9999916	.9999912	.9999944	.9999960	.999991		

AMCP 706-109

$$P(c, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 64

x	.41	.42	.43	.44	.45	.46	.47	.48
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	.9999994	.9999997	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
10	.9999971	.9999986	.9999993	.9999997	.9999999	.9999999	1.0000000	1.0000000
11	.9999885	.9999943	.9999972	.9999987	.9999994	.9999997	.9999999	.9999999
12	.9999592	.9999788	.9999892	.9999946	.9999974	.9999988	.9999994	.9999997
13	.9998692	.9999204	.9999627	.9999807	.9999903	.9999952	.9999977	.9999989
14	.9996191	.9997864	.9998827	.9999370	.9999669	.9999837	.9999914	.9999958
15	.9991860	.9994089	.9996628	.9998118	.9998972	.999945	.9999714	.9999854
16	.9975193	.9984979	.9991098	.9994838	.9997072	.9998376	.9999120	.9999531
17	.9943081	.9964776	.9978323	.9986947	.9992311	.9995571	.9997506	.9998628
18	.9882739	.9923468	.9951111	.9969440	.9981312	.9988825	.9993467	.9996268
19	.9771515	.9845363	.9897508	.9933522	.9957815	.9973819	.9984114	.9990579
20	.9584557	.9708430	.9799609	.9865198	.9911271	.9942871	.9964033	.9977866
21	.9292337	.9485324	.9633438	.9744412	.9825586	.9883555	.9923966	.9951463
22	.8866718	.9146819	.9370785	.9545565	.9678699	.9777685	.9849519	.9900396
23	.8288617	.8667713	.8983509	.9240194	.9443800	.9601413	.9720463	.9800262
24	.7555085	.8034171	.8450004	.8802053	.9092845	.9327213	.9511527	.9652960
25	.6684143	.7250437	.7762456	.8213952	.8602305	.8928184	.9194972	.9408059
26	.5715840	.6342386	.6932573	.7474626	.7960145	.8384322	.8745822	.9046360
27	.4706508	.5356055	.5993494	.6603277	.7172038	.7689328	.8148367	.8545546
28	.3719352	.4350829	.4966448	.5539222	.6065521	.6556229	.7002698	.7404915
29	.2812866	.3388931	.4002526	.4639297	.5283343	.5918374	.6528897	.7101289
30	.2031080	.2524253	.3071738	.3663512	.4286785	.4926620	.5566970	.6191882
31	.13395901	.1793749	.2252537	.2760043	.3335525	.3940987	.4571784	.5212521
32	.0813703	.1213571	.1574736	.1998235	.2401902	.2802122	.3203748	.3601848
33	.0567428	.0780313	.1047434	.1373670	.1761658	.2211167	.2718666	.3277165
34	.0334088	.0476082	.0661699	.0897813	.1190224	.1542939	.1957480	.2432326
35	.0166244	.0275215	.0396362	.0556915	.0763941	.1023934	.1342026	.1721285
36	.0098182	.0150539	.0224824	.0327331	.0464969	.0644978	.0874215	.1158703
37	.0048885	.0077811	.0120568	.0182019	.0267952	.0384934	.0540029	.0740373
38	.0022961	.0037957	.0061049	.0095617	.0145954	.0217297	.0315761	.0448151
39	.0010161	.0017451	.0029147	.0047382	.0075032	.0115833	.0174453	.0256491
40	.0004231	.0007552	.0013102	.0022115	.0036347	.0058211	.0090912	.0138546
41	.0001655	.0003071	.0005537	.0009708	.0016565	.0027533	.0044610	.0070501
42	.0000608	.0001172	.0002197	.0004031	.0007091	.0012236	.0020574	.0033734
43	.0000209	.0000419	.0000817	.0001546	.0002846	.0005099	.0008902	.0015148
44	.0000067	.0000140	.0000284	.0000559	.0001069	.0001989	.0003606	.0006371
45	.0000020	.0000044	.0000092	.0000189	.0000375	.0000725	.0001365	.0002504
46	.0000005	.0000013	.0000028	.0000059	.0000122	.0000246	.0000481	.0000917
47	.0000001	.0000003	.0000008	.0000017	.0000037	.0000078	.0000158	.0000313
48		.0000001	.0000002	.0000001	.0000001	.0000001	.0000001	.0000001
49								
50								
51							.0000001	.0000002

x	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	1.0000000	1.0000000
8	1.0000000	1.0000000
9	1.0000000	1.0000000
10	1.0000000	1.0000000
11	1.0000000	1.0000000
12	.9999999	.9999999
13	.9999995	.9999998
14	.9999980	.9999971
15	.9999927	.9999965
16	.9999759	.9999878
17	.9999263	.9999613
18	.9997918	.9998866
19	.9994543	.9996913
20	.9986692	.9992186
21	.9969721	.9981550
22	.9945558	.9969265
23	.9914003	.9958709
24	.9875884	.9950171
25	.9834096	.9940294
26	.9790091	.9930891
27	.9748079	.9925678
28	.9707389	.9924823
29	.9668449	.9928116
30	.9634544	.9934846
31	.9607143	.9946098
32	.9587314	.9961734
33	.9574365	.9983268
34	.9568257	.9999904
35	.9571670	.9991344
36	.9588830	.9988664
37	.9629802	.9982177
38	.9691825	.9973215
39	.9778373	.9961710
40	.9896159	.9949706
41	.9958751	.9938339
42	.9965368	.9928491
43	.9925141	.9920735
44	.9840976	.9918450
45	.9704478	.9927614

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 64

\bar{p}	.49	.50
46	.0001704	.0003087
47	.0000603	.0001134
48	.0000198	.0000387
49	.0000060	.0000122
50	.0000017	.0000035
51	.0000004	.0000009
52	.0000001	.0000002
53		.0000001

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$$P(c, n; p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 66

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.4794595	.7330355	.8619098	.9295907	.9643521	.9808811	.9910585	.9955470
2	.1380218	.3742459	.5843059	.7388988	.8423906	.9077369	.9473147	.9705441
3	.0275934	.1412405	.3095639	.4846429	.6370033	.7550049	.8419524	.909013
4	.0041692	.0413810	.1311232	.2621670	.4099075	.5523385	.6754121	.777274
5	.0005018	.0097928	.0455820	.1104079	.2247923	.3509576	.4811149	.6023191
6	.0000498	.0019280	.0133057	.0464501	.1059743	.1941375	.3026954	.4204773
7	.0000042	.0003229	.0033233	.0150176	.0432869	.0946396	.1684014	.2623540
8	.0000003	.0000468	.0007211	.0043300	.015226	.0401075	.0632047	.1046624
9		.0000060	.0001376	.0011015	.0049283	.0152663	.0367167	.0734003
10		.0000007	.0000233	.0002495	.0013968	.0051922	.0145498	.0331632
11		.0000001	.0000035	.0000507	.0003560	.0015912	.0058081	.0135655
12			.0000005	.0000093	.0000621	.0004419	.0016923	.0053555
13			.0000001	.0000016	.0000172	.0001118	.0005015	.0017162
14				.0000002	.000003	.0000254	.0001161	.0005352
15					.0000005	.0000055	.0000340	.0001552
16					.0000001	.0000011	.0000078	.0000406
17						.0000002	.0000007	.0000029
18							.0000001	.0000002
19							.0000001	.0000001
20								.0000001
21								
22								
23								
24								
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$$P(n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 65

x	.41	.42	.43	.44	.45	.46	.47	.48
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	.99999996	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	.99999980	.99999991	.99999995	.99999998	.99999999	1.00000000	1.00000000	1.00000000
11	.99999920	.99999961	.99999981	.99999991	.99999996	.99999998	.99999999	1.00000000
12	.99999712	.99999853	.99999927	.99999964	.99999983	.99999992	.99999998	.99999998
13	.99999061	.99999503	.99999741	.99999869	.99999935	.99999976	.99999995	.99999999
14	.99997316	.99998464	.99999171	.99999562	.99999774	.99999886	.99999944	.99999973
15	.99992455	.99995675	.99997574	.99998669	.99999286	.99999625	.99999838	.99999904
16	.99981206	.99988805	.99993476	.99996281	.99997227	.99998871	.99999329	.99999607
17	.99956778	.99973261	.99983816	.99990419	.99994453	.99996861	.99998265	.99999063
18	.99907848	.99940817	.99962812	.99977143	.99986262	.99991028	.99993369	.99994601
19	.99817175	.99780167	.99820557	.99849326	.99860309	.99880722	.99890510	.99903710
20	.99661309	.99659742	.99681706	.99695261	.99693216	.99695107	.99697347	.99695969
21	.99412188	.99379029	.99404092	.99397556	.99386414	.99370840	.99342797	.99341137
22	.99041220	.99009992	.99037226	.99033058	.99014798	.99026385	.99045099	.99049008
23	.98525637	.98689338	.9850037	.98374557	.98549505	.98682498	.98781130	.98824467
24	.97855797	.98300259	.98679411	.98994835	.99250775	.99453345	.99609736	.99727505
25	.97041204	.97579606	.98058102	.98472716	.98823048	.99111737	.99343753	.99525671
26	.96112844	.96723168	.97289422	.97799930	.98249117	.98634499	.98956922	.99219976
27	.95120334	.95770314	.96397298	.96986671	.97526686	.98009058	.98429171	.98785577
28	.94124086	.94773024	.95425178	.96063686	.96672904	.97239462	.97753162	.98207318
29	.93104525	.93792928	.94439913	.95079484	.95724873	.96349767	.96939883	.97482730
30	.92351495	.92887418	.93471977	.94092857	.94735236	.95302827	.95819080	.96283398
31	.91656833	.92100561	.92604793	.93162609	.93763592	.94394378	.95039525	.95682614
32	.91111814	.91457246	.91866190	.92337389	.92866032	.93443720	.94050774	.94696934
33	.90709400	.90962281	.91274174	.91648478	.92085760	.92583286	.93134701	.93730210
34	.90429757	.90603859	.90727565	.91071909	.91447369	.91856324	.92315237	.92833784
35	.90246860	.90359579	.90510468	.90706910	.90955770	.91262676	.91631209	.92062385
36	.90134287	.90202903	.90290594	.90428348	.90599117	.90819298	.91094086	.91428742
37	.90069097	.90108357	.90165390	.90245956	.90356119	.90504554	.90697096	.90941171
38	.90033590	.90054636	.90086642	.90133634	.90200053	.90294410	.90421167	.90588417
39	.90015409	.90026064	.90042065	.90068605	.90106947	.90168506	.90240860	.90348488
40	.90006662	.90011710	.90030001	.90033232	.90053755	.90084717	.90130176	.90195160
41	.90002711	.90004953	.90008790	.90015167	.90025467	.90041645	.90066372	.90103163
42	.90001037	.90001970	.90003633	.90005512	.90011354	.90019272	.90031871	.90051382
43	.90000372	.90000736	.90001410	.90002626	.90004756	.90008382	.90014180	.90024069
44	.90000125	.90000257	.90000513	.90000993	.90001868	.90003420	.90006095	.90010564
45	.90000039	.90000084	.90000175	.90000351	.90000607	.90001107	.90002418	.90004360
46	.90000012	.90000026	.90000056	.90000116	.90000236	.90000466	.90000897	.90001679
47	.90000003	.90000007	.90000016	.90000036	.90000076	.90000155	.90000310	.90000603
48	.90000001	.90000002	.90000005	.90000010	.90000022	.90000048	.90000100	.90000201
49			.90000001	.90000003	.90000006	.90000014	.90000030	.90000062
50				.90000001	.90000002	.90000004	.90000008	.90000018
51						.90000001	.90000002	.90000005
52								.90000001

x	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	.99999999	1.00000000
13	.99999997	.99999999
14	.99999987	.99999994
15	.99999953	.99999978
16	.99999841	.99999921
17	.99999506	.99999746
18	.99998577	.99999239
19	.99996196	.99997889
20	.99990539	.99994550
21	.99978037	.99986868
22	.99952298	.99970408
23	.99902819	.99937487
24	.99813997	.99875940
25	.99664622	.99768233
26	.99429253	.99591592
27	.99081348	.99319858
28	.98598525	.98937304
29	.97988962	.98494579
30	.97197226	.97816896
31	.96307459	.96992276
32	.95422279	.95978415
33	.94566991	.95000000
34	.93410342	.94021865
35	.92554318	.93007244
36	.91825859	.92885104
37	.91242614	.91505451
38	.90803404	.90726966
39	.90492466	.90630162
40	.90285644	.90408408
41	.90156481	.90231767
42	.90080812	.90124060

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n = 65

$$f(x, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

x	.40	.50
43	.0019268	.0062513
44	.0017918	.0029592
45	.0007662	.0013132
46	.0001063	.0005450
47	.0000147	.0002111
48	.0000034	.0000761
49	.0000012	.0000254
50	.0000003	.0000079
51	.0000001	.0000002
52	.0000000	.0000000
53	.0000000	.0000000

AMCP 706-109

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 66

	.41	.48	.43	.44	.45	.46	.47	.48
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	.99999997	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	.99999997	.99999994	.99999997	.99999999	.99999999	1.00000000	1.00000000	1.00000000
11	.99999945	.99999973	.99999967	.99999994	.99999997	.99999999	1.00000000	1.00000000
12	.99999978	.99999988	.99999950	.99999976	.99999989	.99999995	.99999998	.99999999
13	.99999988	.99999994	.99999981	.99999991	.99999956	.99999979	.99999996	.99999976
14	.99999973	.99999989	.99999946	.99999967	.99999966	.99999975	.99999975	.99999976
15	.99994407	.99998646	.99998260	.99990622	.99995055	.99997745	.99998672	.99999937
16	.99958615	.9991690	.9995238	.9997332	.9998538	.9994218	.9999591	.9999791
17	.99967994	.99974790	.99987970	.9999238	.9999017	.9997786	.9999798	.9999963
18	.99979909	.9995444	.99971844	.99982984	.9999948	.9994197	.9996788	.9999815
19	.99854351	.99904480	.9998727	.99961345	.9996432	.9998877	.9997013	.9999997
20	.99755214	.99813076	.99975613	.99919049	.9994494	.99967970	.99980339	.99988452
21	.95113218	.94657532	.97637782	.98404547	.98947776	.9932183	.9973814	.9973656
22	.9191337	.9410807	.95788422	.97054337	.97985504	.9856234	.9911905	.9943738
23	.87373187	.9045360	.9293522	.94889377	.9637866	.9768686	.9893886	.9975937
24	.82043018	.85491380	.88325964	.91631333	.9452223	.9698713	.9919437	.9988766
25	.73751867	.77882280	.83252964	.87024448	.9015535	.9268877	.9468765	.9688320
26	.6493472	.70813280	.7619954	.8095356	.8507386	.8854028	.9138733	.9366681
27	.55227264	.6170785	.6780912	.7344505	.7831780	.8289676	.8677814	.8994875
28	.4548390	.5191896	.5835787	.6451253	.7031487	.7579040	.8091945	.8573082
29	.3569745	.4204659	.4835889	.5426973	.6160373	.6827629	.7431945	.7983877
30	.2693038	.3327732	.3983889	.4526973	.5160373	.5827629	.6431945	.7038877
31	.1941645	.2431041	.2977682	.3577191	.4200932	.4849064	.5499916	.6136590
32	.1335257	.1737438	.2183790	.2700486	.3269934	.3881083	.451978	.5170061
33	.0874390	.1170164	.1528741	.1951599	.2436708	.2979137	.3574137	.4215937
34	.0544411	.0754396	.1019680	.1343557	.1734649	.2187486	.2700385	.3266188
35	.0321148	.0462176	.0646880	.0883307	.1176989	.1532994	.1952745	.2434

1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
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12	1.00000000	1.00000000
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35	.99999999	.99999999
36	.99999999	.99999999
37	.99999999	.99999999
38	.99999999	.99999999
39	.99999999	.99999999
40	.99999999	.99999999
41	.99999999	.99999999

$$P(r, n, p) = \sum_{i=0}^n \binom{n}{i} p^i (1-p)^{n-i}$$

q%	.49	.50
42	.0117890	.0177914
43	.0039634	.0093286
44	.0028380	.0046082
45	.0012600	.0021362
46	.0005317	.0009891
47	.0002084	.0003781
48	.0000762	.0001436
49	.0000259	.0000507
50	.0000082	.0000166
51	.0000024	.0000030
52	.0000004	.0000014
53	.0000002	.0000004
54		.0000001

$$I(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 67

	.49	.50
4	.01679211	.08490881
4.4	.00881774	.01256600
4.44	.00436900	.0059669
4.444	.0020377	.0033707
4.4444	.00099328	.0015327
4.44444	.00036688	.0006536
4.444444	.00014100	.0002609
4.4444444	.00005506	.0000971
4.44444444	.0000169	.0000337
4.444444444	.00000552	.0000108
4.4444444444	.0000015	.0000032
4.44444444444	.0000004	.0000009
4.444444444444	.0000001	.0000002
4.4444444444444		.0000001

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$$P(n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 60

	.01	.02	.03	.04	.05	.06	.07	.08
1	.4951141	.7468528	.8739688	.9377063	.9694364	.9851169	.9928002	.9955520
2	.1483230	.3955465	.6089136	.7612076	.8600507	.9205178	.9559943	.9761636
3	.0309756	.1553676	.3342946	.5148449	.6671864	.7823857	.8631819	.9167713
4	.0048982	.0475322	.1474403	.2890123	.4438700	.5884130	.7094061	.8031511
5	.0006170	.0117705	.0535316	.1361049	.2528746	.3872179	.5214978	.6426010
6	.0000644	.0024207	.0163554	.0545542	.1242057	.2228372	.3403603	.4639017
7	.0000057	.0004268	.0024027	.0188758	.0530987	.1126672	.1978426	.3007415
8	.0000004	.0000650	.0009756	.0057088	.0199511	.0503826	.1018162	.1750778
9		.0000087	.0001957	.0015255	.0064484	.0200686	.0470486	.0917572
10		.0000010	.0000349	.0003635	.0019808	.0071690	.0195666	.0434355
11		.0000001	.0000056	.0000778	.0005314	.0023111	.0073622	.0186746
12			.0000008	.0000151	.0001291	.0006761	.0025187	.0073126
13			.0000001	.0000027	.0000286	.0001804	.0007870	.0026196
14				.0000004	.0000058	.0000441	.0002255	.0008616
15				.0000001	.0000011	.0000099	.0000595	.0002611
16					.0000002	.0000021	.0000145	.0000731
17						.0000004	.0000033	.0000190
18						.0000001	.0000007	.0000046
19							.0000001	.0000010
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$$P(r, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 60

r	.41	.42	.43	.44	.45	.46	.47	.48
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	.99999994	.99999997	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
11	.99999974	.99999988	.99999994	.99999998	.99999999	1.00000000	1.00000000	1.00000000
12	.99999901	.99999952	.99999977	.99999990	.99999995	.99999998	.99999999	1.00000000
13	.99999659	.99999828	.99999915	.99999959	.99999981	.99999991	.99999996	.99999998
14	.99989435	.99994441	.99997113	.99998556	.99999530	.99999966	.99999984	.99999993
15	.99969660	.99983441	.9999116	.9999539	.9999765	.99999803	.99999943	.99999973
16	.9992017	.9995474	.9997492	.9998642	.9999282	.9999629	.9999813	.9999808
17	.9980640	.9988597	.9993435	.9996308	.9997971	.9998512	.9999430	.9999709
18	.9956456	.9973363	.9984074	.9990692	.9994692	.9997042	.9998392	.9999147
19	.9908640	.9942107	.9964066	.9978206	.9987078	.9992530	.9995782	.9997676
20	.9821764	.9882545	.9934344	.9952379	.9970777	.9982416	.9989692	.9994103
21	.9673513	.9776875	.9850929	.9902662	.9937902	.9961306	.9976460	.9986023
22	.9438034	.9601972	.9724338	.9813375	.9876538	.9920803	.9949639	.9968475
23	.9080444	.9331393	.9520319	.9663500	.9769261	.9842403	.9888392	.9919477
24	.8602573	.8939520	.9212500	.9427901	.9591727	.9717964	.9808708	.9873291
25	.7969500	.8407452	.8777099	.9081013	.9324443	.9514416	.9658864	.9765870
26	.7195259	.7729340	.8199009	.8601205	.8936673	.9209245	.9424994	.9591352
27	.6305351	.6817224	.7477761	.7977718	.8411963	.8779311	.9081996	.9324928
28	.5344243	.6024227	.6631185	.7215678	.7744151	.8209604	.8608846	.8942370
29	.4364608	.5076560	.5696446	.6338944	.6904978	.7498977	.7994452	.8425887
30	.3436410	.4073580	.4723613	.5388700	.6041173	.6666403	.7242949	.7766932
31	.2578852	.3151527	.3769553	.4418272	.5080811	.5739367	.6376594	.6976906
32	.1856875	.2341941	.2807304	.3483536	.4174333	.4773848	.5434034	.6082900
33	.1236770	.1664087	.2117755	.2634344	.3206444	.3822855	.4469197	.5128866
34	.0847361	.1129484	.1484422	.1906466	.2393152	.2939105	.3535031	.4168121
35	.0522406	.0729435	.0992627	.1317741	.1708160	.2164139	.2682254	.3255176
36	.0310037	.0448641	.0632210	.0868387	.1161724	.1522844	.1947625	.2436536
37	.0174757	.0262251	.0382974	.0544745	.0755398	.1022080	.1350449	.1743840
38	.0093453	.0145519	.0220362	.0324819	.0466459	.0653148	.0892443	.1190835
39	.0047361	.0076560	.0120287	.0183051	.0273603	.0396766	.0561104	.0774403
40	.0022722	.0038148	.0062214	.0098651	.0152225	.0228766	.0335082	.0478711
41	.0010309	.0017982	.0030452	.0050117	.0080226	.0125011	.0189767	.0280825
42	.0004418	.0008009	.0014089	.0024075	.0039996	.0064651	.0101762	.0156079
43	.0001786	.0003366	.0006153	.0010921	.0018836	.0031597	.0051592	.0080254
44	.0000691	.0001334	.0002534	.0004671	.0008367	.0014572	.0024491	.0040737
45	.0000244	.0000497	.0000982	.0001882	.0003501	.0006331	.0011137	.0019060
46	.0000082	.0000174	.0000358	.0000713	.0001377	.0002587	.0004726	.0008400
47	.0000026	.0000057	.0000122	.0000253	.0000509	.0000993	.0001883	.0003476
48	.0000008	.0000018	.0000039	.0000084	.0000176	.0000357	.0000704	.0001349
49	.0000002	.0000005	.0000012	.0000026	.0000057	.0000120	.0000246	.0000490
50	.0000001	.0000001	.0000003	.0000008	.0000017	.0000038	.0000080	.0000166
51			.0000001	.0000002	.0000005	.0000011	.0000024	.0000052
52				.0000001	.0000001	.0000003	.0000007	.0000015
53					.0000001	.0000001	.0000002	.0000004
54						.0000001	.0000001	.0000001
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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

$$n = 60$$

%	.49	.50
41	.04055401	.0571272
42	.0233420	.03405593
43	.0127107	.01923300
44	.0065487	.0102635
45	.0031900	.0051644
46	.0014538	.0024517
47	.0006246	.0010931
48	.0002516	.0004572
49	.0000949	.0001790
50	.0000334	.0000654
51	.0000109	.0000223
52	.0000033	.0000070
53	.0000009	.0000021
54	.0000003	.0000005
55	.0000001	.0000001

$$P(e, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 69

δ	.01	.02	.03	.04	.05	.06	.07	.08
1	.5001630	.7519157	.8777498	.9401981	.9709645	.9860099	.9933116	.9968878
2	.1517917	.4035726	.6168653	.7682673	.8655300	.9243937	.9598751	.9797126
3	.0381491	.1661712	.3425331	.5246994	.6768297	.7906736	.8696791	.9215126
4	.0051590	.0496890	.1530460	.2980456	.4550358	.6005314	.7208448	.8109407
5	.0006606	.0124857	.0563449	.1422218	.2624253	.3992896	.5346370	.6554430
6	.0000699	.0026155	.0174707	.0578163	.1306392	.2437001	.3530604	.4781977
7	.0000053	.0004662	.0046442	.0203030	.0566541	.1152774	.2072694	.3137943
8	.0000005	.0000722	.0010747	.0069355	.0216085	.0541197	.1084960	.1851309
9		.0000098	.0002191	.0016929	.0073135	.0218874	.0508823	.0984829
10		.0000012	.0000398	.0004100	.0022142	.0079430	.0214903	.0473196
11		.0000001	.0000065	.0000893	.0006038	.0026025	.0063164	.0106370
12			.0000010	.0000176	.0001493	.0007748	.0028377	.0062815
13			.0000001	.0000032	.0000336	.0002101	.0009082	.0027950
14				.0000005	.0000069	.0000523	.0002648	.0010083
15				.0000001	.0000013	.0000020	.0000071	.0003099
16					.0000000	.0000002	.0000017	.0000088
17						.0000000	.0000001	.0000033
18							.0000000	.0000005
19							.0000000	.0000013
20							.0000000	.0000003
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$$P(r, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 60

	.40	.50
40	.00000000	.00000000
41	.00000000	.00000000
42	.00000000	.00000000
43	.00000000	.00000000
44	.00000000	.00000000
45	.00000000	.00000000
46	.00000000	.00000000
47	.00000000	.00000000
48	.00000000	.00000000
49	.00000000	.00000000
50	.00000000	.00000000
51	.00000000	.00000000
52	.00000000	.00000000
53	.00000000	.00000000
54	.00000000	.00000000
55	.00000000	.00000000
56	.00000000	.00000000

$$P(r, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

$$n = 70$$

r	.49	.50
40	.1068165	.1409895
41	.0689681	.0941081
42	.0423601	.0598047
43	.0247084	.0351190
44	.0136650	.0206957
45	.0071542	.0112314
46	.0035398	.0057632
47	.0016526	.0027913
48	.0007267	.0012738
49	.0003004	.0005466
50	.0001165	.0002201
51	.0000423	.0000830
52	.0000143	.0000292
53	.0000045	.0000096
54	.0000013	.0000029
55	.0000004	.0000008
56	.0000001	.0000002
57		.0000001

$$P(o, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 71

ϕ	.49	.50
31	.8457630	.8824512
32	.7824133	.8287645
33	.7063074	.7616581
34	.6198913	.6823462
35	.5270962	.5937057
36	.4328455	.5000000
37	.3422909	.4062943
38	.2592903	.3176538
39	.1892407	.2383439
40	.1317233	.1712352
41	.0875138	.1175488
42	.0553980	.0769564
43	.0333577	.0479618
44	.0190763	.0284073
45	.0103445	.0159636
46	.0053109	.0084973
47	.0025773	.0043773
48	.0011804	.0020386
49	.0005093	.0009102
50	.0002066	.0003834
51	.0000787	.0001516
52	.0000380	.0000561
53	.0000093	.0000194
54	.0000029	.0000063
55	.0000008	.0000019
56	.0000002	.0000005
57	.0000001	.0000001

AMCP 706-109

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 72

	.01	.02	.03	.04	.05	.06	.07	.08
1	.5150084	.7665051	.8884255	.9470911	.9751057	.9883800	.9946801	.9975298
2	.1623074	.4234105	.6399710	.7883644	.8807695	.9349775	.9654647	.9820646
3	.0358069	.1748420	.3671833	.5535811	.7045097	.8139498	.8875600	.9343839
4	.0059966	.0564760	.1703262	.3253196	.4880503	.6337455	.7507383	.8374507
5	.0008024	.0148063	.0653020	.1612566	.2915280	.4353071	.5730906	.6921609
6	.0000888	.0032409	.0211260	.0682876	.1508594	.2630457	.3912406	.5203305
7	.0000083	.0006052	.0053704	.0250312	.0681857	.1402436	.2383523	.3534077
8	.0000007	.0000981	.0014216	.0080376	.0271597	.0663704	.1299245	.2166846
9		.0000140	.0003037	.0022846	.0096157	.0280481	.0635881	.1200351
10		.0000018	.0000578	.0000580	.0030495	.0106536	.0280819	.0602712
11		.0000002	.0000099	.0001325	.0001723	.0036578	.0112451	.0275310
12			.0000015	.0000274	.0002264	.0011233	.0041022	.0114844
13			.0000002	.0000052	.0000516	.0003258	.0013493	.0043914
14				.0000009	.0000116	.0000653	.0004198	.0015447
15				.0000001	.0000023	.0000205	.0001187	.0005015
16					.0000004	.0000046	.0000310	.0001507
17					.0000001	.0000009	.0000075	.0000420
18						.0000002	.0000017	.0000109
19							.0000004	.0000026
20							.0000002	.0000006
21								.0000001
22								
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$$P(x, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 72

x	.33	.34	.35	.36	.37	.38	.39	.40
49					.00000001	.00000002	.00000004	.00000014
50						.00000001	.00000008	.00000004
51								.00000001
x	.41	.42	.43	.44	.45	.46	.47	.48
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	.99999994	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	.99999977	.99999989	.99999995	.99999998	.99999999	1.00000000	1.00000000	1.00000000
13	.99999915	.99999960	.99999982	.99999992	.99999996	.99999998	.99999999	1.00000000
14	.99999717	.99999861	.99999933	.99999969	.99999986	.99999994	.99999997	.99999999
15	.99999136	.99999559	.99999780	.99999893	.99999949	.99999977	.99999989	.99999995
16	.99997376	.99998714	.99999334	.99999663	.99999834	.99999920	.99999963	.99999983
17	.99993715	.99996534	.99998135	.99999020	.99999498	.99999749	.99999878	.99999948
18	.99984875	.99981334	.99985154	.99987356	.99988193	.99989270	.99990280	.99991193
19	.99966106	.99979828	.99983813	.99985360	.99986310	.99986822	.99987062	.99987248
20	.99929035	.99956147	.99973552	.99984436	.99991047	.99995000	.99997273	.99998551
21	.98607669	.9910704	.9944102	.9965356	.9975657	.998179	.9993305	.9996304
22	.9743301	.9824220	.9889089	.9929706	.9955536	.9972991	.9984593	.9991174
23	.9554047	.9692435	.9792883	.9863862	.9912687	.9945378	.9966483	.9980193
24	.9268193	.9477107	.9635107	.9751396	.9834694	.9892762	.9932155	.9958159
25	.8862600	.9158754	.9398101	.9570982	.9704410	.9801251	.9869448	.9916631
26	.8381443	.8716135	.9040126	.9298814	.9499746	.9651581	.9763204	.9843033
27	.7841545	.8136738	.8560138	.8912246	.9197043	.9421106	.9592580	.9720823
28	.7243681	.7421926	.7943233	.8354777	.8775094	.9086617	.9334795	.9527086
29	.65937951	.6590038	.7125294	.7741340	.8220258	.8638686	.8967399	.9240564
30	.4990234	.5676038	.6339214	.6962365	.7531496	.8036826	.8473076	.8839888
31	.4046265	.4727375	.5413546	.6085092	.6723767	.7314172	.7844758	.8308355
32	.3157520	.3796451	.4467448	.5151220	.5828395	.6480141	.7089550	.7644366
33	.2366216	.2933124	.3552990	.4211094	.4889781	.5569630	.6232136	.6859079
34	.1699685	.2175169	.2716809	.3315737	.3958924	.4629932	.5310176	.5980421
35	.1168366	.1545589	.1933229	.2508787	.3085312	.3711515	.4372352	.5050085
36	.0767533	.1050610	.1400587	.1800403	.2300273	.2862100	.3469413	.4117704
37	.0481336	.0682230	.0941088	.1264516	.1656694	.2118426	.2646451	.3233317
38	.0287661	.0422664	.0603017	.0839548	.1137197	.1502047	.1936379	.2438682
39	.0163762	.0248549	.0369471	.0532005	.0745709	.1018436	.1356404	.1763235
40	.0088702	.0140261	.0218349	.0321344	.0466466	.0659287	.0909805	.1219480
41	.0045669	.0074971	.0119428	.0184790	.0277978	.0406085	.0579989	.0805742
42	.0023329	.0038071	.0062951	.0101050	.0157612	.0239073	.0352946	.0507520
43	.0010358	.0018348	.0031504	.0052487	.0084924	.0133562	.0204337	.0304335
44	.0004354	.0008384	.0014953	.0025865	.0043432	.0070855	.0113394	.0173483
45	.0001896	.0003628	.0006724	.0012079	.0021057	.0035648	.0058456	.0093674
46	.0000747	.0001485	.0002861	.0005340	.0009666	.0016987	.0028004	.00448150
47	.0000278	.0000575	.0001150	.0002231	.0004196	.0007656	.0013370	.0023376
48	.0000097	.0000210	.0000437	.0000880	.0001720	.0003259	.0005998	.0010726
49	.0000032	.0000079	.0000156	.0000327	.0000645	.0001309	.0002501	.0004644
50	.0000010	.0000023	.0000053	.0000115	.0000242	.0000495	.0000992	.0001894
51	.0000003	.0000007	.0000017	.0000038	.0000083	.0000176	.0000363	.0000736
52	.0000001	.0000002	.0000005	.0000012	.0000027	.0000059	.0000124	.0000261
53		.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001
54			.0000001	.0000001	.0000001	.0000001	.0000001	.0000001
55				.0000001	.0000001	.0000001	.0000001	.0000001
56					.0000001	.0000001	.0000001	.0000001
57						.0000001	.0000001	.0000001

x	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	.99999998	.99999999
15	.99999999	.99999999
16	.99999999	.99999999
17	.99999999	.99999999
18	.99999999	.99999999
19	.99999999	.99999999
20	.99999999	.99999999
21	.99999999	.99999999
22	.99999999	.99999999
23	.99999999	.99999999
24	.99999999	.99999999
25	.99999999	.99999999
26	.99999999	.99999999
27	.99999999	.99999999
28	.99999999	.99999999
29	.99999999	.99999999
30	.99999999	.99999999

$$P(o, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

λ	.49	.50
30	.9138191	.9375409
31	.8702190	.9027474
32	.8134644	.8556079
33	.7435993	.7952103
34	.6628358	.7230011
35	.5725658	.6380259
36	.4790883	.5468538
37	.3866626	.4531472
38	.3003176	.3619741
39	.2239080	.2779989
40	.1599068	.2047897
41	.1091764	.1443921
42	.0711347	.0972526
43	.0441575	.0624591
44	.0260742	.0381846
45	.0146231	.0218755
46	.0077773	.0122305
47	.0039168	.0063873
48	.0018649	.0031549
49	.0008381	.0014714
50	.0003549	.0006468
51	.0001414	.0002475
52	.0000528	.0001039
53	.0000185	.0000378
54	.0000061	.0000128
55	.0000018	.0000041
56	.0000005	.0000012
57	.0000001	.0000003
58		.0000001

$$P(n, n_1, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 73

	.01	.02	.03	.04	.05	.06	.07	.08
1	.5194585	.7711750	.8817728	.9492075	.9763504	.9890772	.9949067	.9977278
2	.1650148	.4300784	.6474246	.7907134	.8854863	.9301817	.9475055	.9633018
3	.0370717	.1790133	.3753670	.5690704	.7133887	.8019303	.8538133	.881431
4	.0068247	.0508433	.1768319	.3344501	.4988733	.6445590	.7603158	.8458079
5	.0008544	.0156397	.0684587	.1678192	.3013541	.4472134	.5893860	.7077647
6	.0000960	.0034732	.0124581	.0330064	.0774220	.1273381	.1803701	.2340769
7	.0000091	.0006379	.0023081	.0067615	.0172319	.0476305	.0940945	.1448267
8	.0000008	.0000882	.0003551	.0011714	.0034110	.0078040	.0137517	.0214303
9	.0000001	.0000157	.0000372	.0001147	.0003429	.0007375	.0013177	.0021761
10		.0000020	.0000082	.0000248	.0000778	.0001693	.0003067	.0005052
11			.0000011	.0000030	.0000081	.0000185	.0000327	.0000509
12		.0000002	.0000001	.0000003	.0000007	.0000015	.0000023	.0000032
13			.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
14				.0000000	.0000000	.0000000	.0000000	.0000000
15					.0000000	.0000000	.0000000	.0000000
16						.0000000	.0000000	.0000000
17							.0000000	.0000000
18								.0000000
19								.0000000
20								.0000000
21								.0000000
22								.0000000
23								.0000000
24								.0000000
25								.0000000
26								.0000000
27								.0000000
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29								.0000000
30								.0000000
31								.0000000
32								.0000000
33								.0000000
34								.0000000
35								.0000000
36								.0000000
37								.0000000
38								.0000000
39								.0000000
40								.0000000
41								.0000000
42								.0000000
43								.0000000
44								.0000000
45								.0000000
46								.0000000
47								.0000000
48								.0000000
49								.0000000
50								.0000000
51								.0000000
52								.0000000
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56								.0000000
57								.0000000
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59								.0000000
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62								.0000000
63								.0000000
64								.0000000
65								.0000000
66								.0000000
67								.0000000
68								.0000000
69								.0000000
70								.0000000
71								.0000000
72								.0000000
73								.0000000

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 73

c	.49	.50
28	.9740901	.9827520
29	.9561215	.9698150
30	.9293326	.9496782
31	.8915831	.9201442
32	.8417740	.8791776
33	.7778332	.8254091
34	.7021036	.7586057
35	.6165038	.6800135
36	.5248617	.5924394
37	.4319218	.5000000
38	.3426266	.4075606
39	.2613487	.3199865
40	.1912674	.2413943
41	.1340343	.1745909
42	.0897752	.1208224
43	.0573763	.0798558
44	.0340350	.0503218
45	.0202341	.0301850
46	.0111317	.0172080
47	.0058084	.0093089
48	.0028703	.0047711
49	.0013412	.0023131
50	.0005917	.0010591
51	.0002460	.0004571
52	.0000962	.0001857
53	.0000353	.0000708
54	.0000122	.0000253
55	.0000039	.0000085
56	.0000012	.0000026
57	.0000003	.0000008
58	.0000001	.0000002
59		.0000001

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 74

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.5246600	.7757515	.8950196	.9512392	.9775329	.9897326	.9953465	.9979093
2	.1693553	.4370904	.6547551	.8004932	.8900295	.9412354	.9694299	.9844558
3	.0383591	.1648225	.3855287	.5722421	.7219309	.8202474	.8822278	.9175588
4	.0066925	.0612627	.1822060	.3455910	.5095950	.6551593	.7696046	.8526427
5	.0009087	.0165038	.0714861	.1744044	.3312301	.4590542	.5877613	.7150786
6	.0001035	.0037155	.0278321	.0758389	.1650689	.2828113	.4166799	.5476536
7	.0000100	.0007142	.0049118	.0285713	.0765981	.1551756	.2599358	.3802085
8	.0000008	.0001192	.0016981	.0094391	.0136664	.0241336	.0453270	.0776443
9	.0000001	.0000175	.0003737	.0027628	.0114288	.0127749	.0739817	.1157560
10		.0000023	.0000733	.0007228	.0037335	.0128163	.0333039	.0700695
11		.0000003	.0000129	.0001703	.0011010	.0045357	.0136938	.0329424
12			.0000021	.0000364	.0003948	.0014604	.0051498	.0141587
13			.0000003	.0000071	.0000721	.0004299	.0017735	.0055836
14				.0000013	.0000162	.0001162	.0005615	.0020273
15				.0000002	.0000033	.0000289	.0001640	.0006799
16					.0000006	.0000067	.0000443	.0002112
17					.0000001	.0000014	.0000111	.0000610
18						.0000001	.0000002	.0000016
19							.0000001	.0000001
20							.0000001	.0000001
21								.0000002

x	.09	.10	.11	.12	.13	.14	.15	.16
1	.9990684	.9995889	.9998202	.9999221	.9999665	.9999858	.9999940	.9999975
2	.9922533	.9862088	.9807557	.9749357	.9697572	.9649677	.9605251	.9563824
3	.9474502	.9385004	.9297465	.9212115	.9130443	.9052201	.8977807	.8906014
4	.8867332	.8738490	.8607422	.8484055	.8368396	.8260426	.8160130	.8066266
5	.6647847	.6167000	.5699142	.5222121	.4710124	.4157142	.3571053	.2947523
6	.5033376	.4183286	.3366334	.2576060	.1829014	.1130184	.0482705	.0000000
7	.3489271	.2613230	.1789027	.1016340	.0300114	.0000000	.0000000	.0000000
8	.2197494	.1397906	.0680027	.0236913	.0059550	.0000000	.0000000	.0000000
9	.1265679	.0625116	.0242379	.0065606	.0012861	.0000000	.0000000	.0000000
10								
11	.0666653	.0178101	.0067752	.0210879	.0059220	.0017799	.0000000	.0000000
12	.0321060	.0080535	.0024557	.0007374	.0002231	.0000632	.0000111	.0000000
13	.0068565	.0014186	.0002987	.0000635	.0000139	.0000031	.0000000	.0000000
14	.0022106	.0002917	.0000335	.0000034	.0000003	.0000000	.0000000	.0000000
15								
16	.0007794	.0001497	.0000124	.0000032	.0000003	.0000000	.0000000	.0000000
17	.0002444	.0000257	.0000026	.0000002	.0000000	.0000000	.0000000	.0000000
18	.0000775	.0000018	.0000001	.0000000	.0000000	.0000000	.0000000	.0000000
19	.0000220	.0000008	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
20	.0000059	.0000002	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
21	.0000015	.0000007	.0000002	.0000000	.0000000	.0000000	.0000000	.0000000
22	.0000003	.0000002	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
23	.0000001	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
24		.0000001	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
25			.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
26				.0000000	.0000000	.0000000	.0000000	.0000000
27				.0000000	.0000000	.0000000	.0000000	.0000000
28					.0000000	.0000000	.0000000	.0000000
29						.0000000	.0000000	.0000000
30							.0000000	.0000000
31								.0000001

x	.17	.18	.19	.20	.21	.22	.23	.24
1	.9999950	.9999926	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
2	.9999944	.9999928	.9999976	.9999988	.9999996	.9999999	.9999999	.9999999
3	.9999947	.9999982	.9999971	.9999984	.9999994	.9999997	.9999999	.9999999
4	.9999947	.9999509	.9998304	.9996190	.9993620	.9990825	.9987921	.9984945
5	.9972140	.9985315	.9992417	.9996161	.9998094	.9999071	.9999556	.9999791
6	.9912479	.9950913	.9973084	.9985558	.9992413	.9996095	.9998030	.9999025
7	.9771950	.9848070	.9920933	.9955075	.9975046	.9986440	.9992788	.9996243
8	.9492345	.9670885	.9802098	.9881048	.9930200	.9959988	.9975577	.9984709
9	.9012721	.9338437	.9568647	.9721044	.9830362	.9897502	.9939526	.9965139
10	.8292321	.8790400	.9167073	.9441675	.9635740	.9768258	.9856176	.9912870
11	.7333235	.8008444	.8554796	.8980101	.9299463	.9531110	.9694148	.9805501
12	.6190315	.7009760	.7719186	.8308429	.8779375	.9142474	.9413106	.9608458
13	.4961332	.5858838	.6690148	.7426660	.8053556	.8566696	.8972088	.9281648
14	.3760824	.4653932	.5538954	.6375752	.7133384	.7792179	.8343776	.8789450
15	.2689458	.3501505	.4326382	.5230809	.6067616	.6840344	.7526064	.8112213
16	.1811713	.2489618	.3258437	.4085859	.4934395	.5766482	.6549057	.7256757
17	.1148777	.1670545	.2303559	.3030359	.3823565	.4649596	.5472222	.6266001
18	.0585521	.1057121	.1539379	.2130079	.2816165	.3574824	.4383734	.5140719
19	.0235653	.0610717	.0971747	.1417357	.1968147	.2614878	.3338092	.4114084
20	.0095671	.0354840	.0579310	.0892194	.1303743	.1816666	.2425613	.3125152
21	.0010106	.0138305	.0266164	.0531144	.0818056	.1197896	.1675456	.2247657
22	.0004759	.0094303	.0173473	.0299041	.0486067	.0748972	.1097253	.1543226
23	.0002114	.0044592	.0087188	.0158251	.0273465	.0443014	.0684618	.1007319
24	.0000853	.0016921	.0044429	.0080240	.0145693	.0249417	.0404605	.0624703
25	.0000350	.0008413	.0018620	.0036265	.0073517	.0132832	.0226670	.0367946
26	.0001369	.0003361	.0007919	.0017278	.0035146	.0067066	.0120690	.0205786
27	.0000463	.0001270	.0003189	.0007389	.0015923	.0032107	.0060910	.0109278
28	.0000155	.0000453	.0001216	.0002955	.0006870	.0014578	.0028177	.0055597
29	.0000049	.0000140	.0000340	.0000810	.0001975	.0004279	.0008326	.0016377
30	.0000015	.0000030	.0000071	.0000169	.0000419	.0001076	.0002566	.0005192
31	.0000004	.0000015	.0000049	.0000145	.0000394	.0000995	.0002344	.0005177
32	.0000001	.0000004	.0000015	.0000047	.0000137	.0000366	.0000937	.0002223
33		.0000001	.0000004	.0000015	.0000045	.0000128	.0000337	.0000822
34			.0000001	.0000004	.0000014	.0000042	.0000118	.0000306

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 74

	.33	.34	.35	.36	.37	.38	.39	.40
38	.0008372	.0015675	.0028220	.0046942	.0081896	.0132422	.0207196	.0314118
39	.0003665	.0007158	.0013431	.0024255	.0043229	.0070993	.0115400	.0181617
40	.0001525	.0003108	.0006079	.0011436	.0020725	.0036239	.0061226	.0100078
41	.0000603	.0001283	.0002616	.0005127	.0009675	.0017601	.0030919	.0052513
42	.0000228	.0000503	.0001069	.0002184	.0004293	.0008128	.0014851	.0026216
43	.0000081	.0000187	.0000418	.0000884	.0001805	.0003566	.0006779	.0012444
44	.0000027	.0000066	.0000153	.0000339	.0000724	.0001485	.0002938	.0005610
45	.0000009	.0000022	.0000053	.0000124	.0000275	.0000587	.0001209	.0002400
46	.0000003	.0000007	.0000018	.0000043	.0000099	.0000220	.0000471	.0000974
47	.0000001	.0000002	.0000006	.0000014	.0000034	.0000078	.0000174	.0000374
48		.0000001	.0000002	.0000004	.0000011	.0000026	.0000061	.0000136
49				.0000001	.0000003	.0000008	.0000020	.0000047
50					.0000001	.0000002	.0000006	.0000015
51						.0000001	.0000002	.0000005
52							.0000001	.0000001

	.41	.42	.43	.44	.45	.46	.47	.48
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	.9999995	.9999995	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
13	.9999993	.9999991	.9999992	.9999996	.9999998	.9999999	1.0000000	1.0000000
14	.9999985	.9999982	.9999988	.9999994	.9999997	.9999999	.9999999	1.0000000
15	.9999958	.9999977	.9999983	.9999990	.9999997	.9999999	.9999996	.9999998
16	.9999891	.9999328	.9999664	.9999836	.9999922	.9999964	.9999984	.9999993
17	.9999644	.9998130	.9999027	.9999506	.9999756	.9999882	.9999945	.9999975
18	.9991287	.9995169	.9997388	.9998623	.9999292	.9999646	.9999827	.9999918
19	.9979887	.9988380	.9993473	.9996425	.9998092	.9999007	.9999497	.9999752
20	.9956357	.9973891	.9984767	.9991335	.9995196	.9997405	.9998635	.9999301
21	.9911503	.9945037	.9966707	.9980337	.9988680	.9993651	.9996531	.9998155
22	.9831354	.9891309	.9931673	.9958116	.9974973	.9985487	.9991734	.9995435
23	.9697175	.9797580	.9868003	.9916056	.9947953	.9968550	.9981486	.9989387
24	.9486364	.9644128	.9759410	.9841340	.9897974	.9936047	.9960940	.9976765
25	.9175062	.9407997	.9585327	.9716592	.9811077	.9877211	.9922228	.9952006
26	.8742403	.9066014	.9323675	.9520558	.9668881	.9776971	.9853553	.9906298
27	.8175774	.8599304	.8949258	.9230278	.9449623	.9616045	.9738788	.9826782
28	.7475756	.7998481	.8448455	.8824807	.9130701	.9372338	.9557859	.9696894
29	.6659211	.7268170	.7814294	.8290041	.8692701	.9023862	.9288538	.9494109
30	.5759149	.6429311	.7055448	.7623559	.8124262	.8552998	.8920702	.9198078
31	.4802050	.5518136	.6196734	.6838062	.7426633	.7951337	.8405778	.8788175
32	.3895574	.4581624	.5277315	.5962070	.6616482	.7223882	.7771502	.8251138
33	.3031465	.3670340	.4345274	.5037194	.5725777	.6391181	.7015682	.7585005
34	.2267215	.2830474	.3450396	.4112319	.4798266	.5488387	.6162629	.6802416
35	.1626784	.2097081	.2636324	.3236018	.3883155	.4561008	.5250403	.5931899
36	.1118161	.1490136	.1934468	.2449137	.3027467	.3658162	.4325882	.5012318
37	.0715254	.1013998	.1360875	.1779350	.2269016	.2824981	.3437702	.4093337
38	.0461979	.0659889	.0916470	.1238667	.1631693	.2096051	.2628784	.3222121
39	.0277072	.0410214	.0590039	.0825376	.1123970	.1491452	.1930319	.2433984
40	.0158461	.0243322	.0362727	.0525482	.0740514	.1016040	.1358571	.1771881
41	.0086340	.0137576	.0212681	.0319305	.0468995	.0661682	.0914927	.1232986
42	.0044778	.0074075	.0118881	.0184966	.0279734	.0411359	.0588676	.0820474
43	.0022086	.0037945	.0063176	.0102033	.0159998	.0243815	.0361356	.0521289
44	.0010350	.0018475	.0031941	.0053540	.0087092	.0137602	.0211338	.0315767
45	.0004605	.0008542	.0015340	.0026696	.0045066	.0073857	.0117609	.0182105
46	.0001943	.0003746	.0006990	.0012635	.0022142	.0037656	.0062197	.0099858
47	.0000777	.0001577	.0003019	.0005670	.0010318	.0018215	.0031218	.0051966
48	.0000294	.0000613	.0001235	.0002409	.0004554	.0008349	.0014858	.0025663
49	.0000105	.0000228	.0000478	.0000969	.0001902	.0003621	.0006628	.0011994
50	.0000035	.0000080	.0000174	.0000368	.0000750	.0001484	.0002847	.0005301
51	.0000011	.0000027	.0000060	.0000132	.0000279	.0000574	.0001144	.0002218
52	.0000003	.0000008	.0000019	.0000044	.0000098	.0000209	.0000433	.0000870
53	.0000001	.0000002	.0000006	.0000014	.0000033	.0000072	.0000153	.0000329
54		.0000001	.0000003	.0000008	.0000018	.0000043	.0000098	.0000218
55				.0000001	.0000003	.0000007	.0000016	.0000036
56					.0000001	.0000002	.0000005	.0000011
57						.0000001	.0000001	.0000001
58							.0000001	.0000001

	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	1.0000000	1.0000000
8	1.0000000	1.0000000
9	1.0000000	1.0000000
10	1.0000000	1.0000000
11	1.0000000	1.0000000
12	1.0000000	1.0000000
13	1.0000000	1.0000000
14	1.0000000	1.0000000
15	.9999999	1.0000000
16	.9999997	.9999999
17	.9999989	.9999995

$$P(o, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 74

x	.49	.50
10	.9999962	.9999963
19	.9999881	.9999945
20	.9999652	.9999831
21	.9999045	.9999519
22	.9997547	.9998718
23	.9994079	.9996786
24	.9986545	.9992419
25	.9971164	.9983139
26	.9941608	.9945379
27	.9888092	.9896000
28	.9796682	.9867416
29	.9649261	.9763035
30	.9424592	.9597466
31	.9106803	.9349112
32	.8659255	.8996609
33	.8089193	.8528934
34	.7392111	.7980074
35	.6584477	.7193096
36	.5697663	.6362265
37	.4776224	.5462197
38	.3863813	.4537803
39	.3011749	.3637735
40	.2256072	.2806904
41	.1620785	.2079926
42	.1114622	.1477066
43	.0732318	.1003391
44	.0459312	.0650888
45	.0274375	.0402534
46	.0155919	.0236965
47	.0084169	.0132584
48	.0043100	.0070400
49	.0020905	.0035421
50	.0009590	.0016661
51	.0004154	.0007381
52	.0001696	.0003214
53	.0000652	.0001202
54	.0000235	.0000481
55	.0000080	.0000169
56	.0000025	.0000055
57	.0000007	.0000017
58	.0000002	.0000005
59	.0000001	.0000001

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$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 75

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.5294134	.7802364	.8981690	.9531896	.9786563	.9903486	.9956727	.9980763
2	.1729083	.4438637	.6619630	.8069070	.8944047	.9441453	.9712441	.9855381
3	.0396691	.1898679	.3916655	.5813881	.7303358	.8350257	.9031120	.9431718
4	.0069200	.0437339	.1882457	.3527370	.5202125	.6655446	.7786088	.8597718
5	.0009657	.0173990	.0750017	.1812487	.3211484	.4708205	.6097903	.7281021
6	.0001116	.0039713	.0252677	.0797847	.1723741	.2943259	.4293548	.5610498
7	.0000110	.0007742	.0073235	.0304620	.0810215	.1628937	.2705078	.3956041
8	.0000009	.0001311	.0018517	.0102044	.0336280	.0801993	.1533504	.2500798
9	.0000001	.0000195	.0004135	.0030299	.0124287	.0353332	.0781389	.1439967
10		.0000026	.0000823	.0008044	.0041183	.0140138	.0359953	.0753248
11		.0000003	.0000147	.0001924	.0012326	.0050325	.0150595	.0359126
12			.0000034	.0000417	.0003351	.0016449	.0057478	.0156614
13			.0000004	.0000083	.0000832	.0004917	.0020098	.0062696
14				.0000015	.0000190	.0001350	.0006463	.0023118
15				.0000002	.0000040	.0000342	.0001918	.0007877
16					.0000008	.0000080	.0000527	.0002487
17					.0000001	.0000017	.0000135	.0000730
18						.0000004	.0000038	.0000280
19						.0000001	.0000007	.0000051
20							.0000001	.0000002
21								.0000003
22								.0000001
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$$P(x, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 75

x	.17	.18	.19	.20	.21	.22	.23	.24
13		.00000002	.00000006	.00000021	.00000065	.0000186	.0000469	.0001138
14			.00000002	.00000002	.00000006	.00000061	.0000168	.0000431
15				.00000002	.00000006	.00000020	.0000057	.0000158
16				.00000001	.00000002	.00000006	.0000019	.0000053
17					.00000001	.00000002	.00000006	.0000017
18							.00000002	.0000005
19								.0000000
x	.25	.26	.27	.28	.29	.30	.31	.32
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
4	.99999998	.99999995	.99999998	.99999999	.99999999	.99999999	.99999999	.99999999
5	.99999994	.99999986	.99999985	.99999994	.99999997	.99999999	.99999999	.99999999
6	.99999921	.99999822	.99999910	.99999863	.99999884	.99999933	.99999977	.99999993
7	.99999844	.99999632	.99999629	.99999624	.99999618	.99999633	.99999683	.99999723
8	.99999576	.99999189	.99999574	.99999291	.99999655	.99999836	.99999923	.99999965
9	.99999317	.99999087	.99999257	.99999531	.99999742	.99999937	.99999964	.99999984
10	.99999423	.99999127	.99999125	.99999233	.99999565	.99999789	.99999926	.99999944
11	.99999596	.99999118	.99999134	.99999350	.99999478	.99999716	.99999853	.99999853
12	.99999754	.99999120	.99999114	.99999286	.99999408	.99999631	.99999765	.99999806
13	.99999825	.99999125	.99999110	.99999292	.99999405	.99999630	.99999761	.99999806
14	.99999839	.99999132	.99999112	.99999291	.99999405	.99999630	.99999761	.99999806
15	.99999842	.99999132	.99999112	.99999291	.99999405	.99999630	.99999761	.99999806
16	.8054075	.8545607	.8940207	.9246940	.9478087	.9647130	.9767213	.9850134
17	.7207582	.7827459	.8351584	.8760158	.9119513	.9380018	.9574088	.9714493
18	.6228307	.6951753	.7596002	.8150154	.8611211	.8982718	.9272948	.9492959
19	.5176492	.5960339	.6695514	.7360705	.7942225	.8434064	.8836993	.9157040
20	.4124677	.4915334	.5696342	.6439582	.7123481	.7728653	.8249410	.8683801
21	.3144981	.3887275	.4661584	.5436789	.6184972	.6882159	.7510246	.8057928
22	.2285177	.2941249	.3615543	.4302238	.4982014	.5632014	.6232014	.6782014
23	.1584739	.2125389	.2749238	.3440291	.4182014	.4932014	.5682014	.6432014
24	.1046128	.1464040	.1973662	.2566528	.3230230	.3945431	.4682377	.5433490
25	.0657132	.0961989	.1352139	.1830302	.2392731	.3028840	.3721781	.4449898
26	.0392614	.0601567	.0883187	.1246230	.1694886	.2227486	.2835874	.3508649
27	.0223053	.0358033	.0549633	.0809423	.1146742	.1562014	.2047388	.2603860
28	.0120477	.0202757	.0335741	.0501142	.0704423	.0932014	.1182014	.1452014
29	.0061863	.0109227	.0181782	.0295622	.0455919	.0665036	.0925014	.1235014
30	.0031098	.0055969	.0098687	.0166088	.0267584	.0413799	.0615729	.0883583
31	.0014013	.0027276	.0050428	.0088848	.0149432	.0241537	.0374428	.0553986
32	.0006182	.0012442	.0024517	.0045245	.0079497	.0134369	.0217388	.0338620
33	.0002593	.0005573	.0011340	.0021929	.0040420	.0071917	.0123522	.0203929
34	.0001034	.0002136	.0004490	.0008114	.0015166	.0028550	.0053387	.0097834
35	.0000392	.0000931	.0002088	.0004439	.0008969	.0017279	.0031828	.0051686
36	.0000141	.0000353	.0000833	.0001853	.0003922	.0007906	.0015218	.0028045
37	.0000046	.0000127	.0000315	.0000736	.0001632	.0003442	.0006927	.0013330
38	.0000016	.0000044	.0000113	.0000278	.0000646	.0001426	.0003000	.0006039
39	.0000005	.0000014	.0000039	.0000100	.0000243	.0000562	.0001236	.0002537
40	.0000001	.0000004	.0000013	.0000034	.0000087	.0000210	.0000485	.0001064
41		.0000001	.0000004	.0000011	.0000030	.0000075	.0000180	.0000414
42			.0000001	.0000003	.0000010	.0000025	.0000064	.0000153
43				.0000001	.0000003	.0000010	.0000025	.0000064
44					.0000001	.0000003	.0000010	.0000025
45						.0000001	.0000003	.0000010
46							.0000001	.0000002
x	.33	.34	.35	.36	.37	.38	.39	.40
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	.99999997	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	.99999994	.99999993	.99999997	.99999999	.99999999	1.00000000	1.00000000	1.00000000
9	.99999932	.99999969	.99999986	.99999994	.99999997	.99999999	1.00000000	1.00000000
10	.99999738	.99999875	.99999941	.99999973	.99999988	.99999995	.99999998	.99999999
11	.99999109	.99999556	.99999784	.99999897	.99999952	.99999978	.99999990	.99999996
12	.99999720	.99999885	.99999981	.99999964	.99999987	.99999991	.99999996	.99999998
13	.99999472	.99999918	.99999987	.99999981	.99999994	.99999997	.99999998	.99999999
14	.99999097	.99999825	.99999940	.99999983	.99999991	.99999994	.99999996	.99999997
15	.99999567	.99999868	.99999989	.99999992	.99999995	.99999997	.99999998	.99999999
16	.9905833	.9942244	.9965421	.9979790	.9988470	.9993579	.9996610	.9998149
17	.9013234	.9880766	.9925707	.9954820	.9973104	.9984461	.9991220	.9995158
18	.7654846	.9770850	.9851490	.9906072	.9942028	.9965085	.9979482	.9988237
19	.6403733	.9588396	.9722720	.9817717	.9883066	.9926806	.9955300	.9973370
20	.5032538	.9306423	.9514708	.9668619	.9779181	.9856432	.9908918	.9943635
21	.3520622	.8899697	.9201089	.9433788	.9608348	.9735635	.9825888	.9888131
22	.2460260	.8350941	.8758807	.9087832	.9345578	.9541745	.9686855	.9791220
23	.1706192	.7657059	.8174251	.8610177	.8966780	.9250056	.9468670	.9632636
24	.1155806	.6833360	.7448933	.7991042	.8454135	.8838092	.9147226	.9389016
25	.0788481	.5913978	.6602729	.7236472	.7801800	.8291021	.8701946	.9037120
26	.4217258	.4947792	.5673206	.6370602	.7020241	.7607006	.8121184	.8558541
27	.3296988	.3990615	.4710682	.5433965	.6137528	.6800785	.7407132	.7944978
28	.2474391	.3095745	.3770096	.4477814	.5196694	.5904021	.6578625	.7208643
29	.1779831	.2305470	.2901863	.3555811	.4249460	.4961798	.5670564	.6345861
30	.1225399	.1645670	.2144174	.2715279	.3347850	.4025864	.4729652	.5434617
31	.0806579	.1124494	.1518595	.1990319	.2535924	.3146287	.3807249	.4500604
32	.0507305	.0734758	.1029619	.1398367	.1843730	.2363730	.2951185	.3593816
33	.0304557	.0458695	.0667589	.0940528	.1284755	.1704235	.2190631	.2725595
34	.0171336	.0273386	.0413577	.0604954	.0856988	.1177542	.1571671	.2040594
35	.0091866	.0155462	.0244618	.0371772	.0546647	.0778775	.1076520	.1445877
36	.0047587	.0084299	.0138045	.0218133	.0333138	.0492471	.0705678	.0981486

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 75

x	.33	.34	.35	.36	.37	.38	.39	.40
37	.0024589	.0043566	.0074283	.0122104	.0193811	.0297497	.0442230	.0637473
38	.0011611	.0021443	.0038093	.0065168	.0107561	.0171537	.0264705	.0395768
39	.0005219	.0010054	.0018607	.0033142	.0056906	.0094336	.0151271	.0234618
40	.0002232	.0004485	.0008652	.0014051	.0024682	.0044446	.0082354	.0132694
41	.0000908	.0001903	.0003828	.0007399	.0013763	.0024684	.0042739	.0071539
42	.0000351	.0000768	.0001611	.0003244	.0006284	.0011728	.0021117	.0036736
43	.0000129	.0000294	.0000644	.0001352	.0002728	.0005300	.0009927	.0017953
44	.0000045	.0000107	.0000245	.0000535	.0001125	.0002376	.0004436	.0008343
45	.0000015	.0000037	.0000088	.0000201	.0000441	.0000928	.0001883	.0003684
46	.0000005	.0000012	.0000030	.0000072	.0000164	.0000359	.0000759	.0001544
47	.0000001	.0000004	.0000010	.0000024	.0000058	.0000132	.0000290	.0000614
48		.0000001	.0000003	.0000008	.0000019	.0000046	.0000105	.0000231
49			.0000002	.0000006	.0000015	.0000036	.0000083	.0000182
50			.0000001	.0000004	.0000010	.0000025	.0000055	.0000122
51					.0000001	.0000001	.0000004	.0000009
52							.0000001	.0000003
53								.0000001

x	.41	.42	.43	.44	.45	.46	.47	.48
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
13	.9999997	.9999997	.9999999	.9999998	.9999999	1.0000000	1.0000000	1.0000000
14	.9999996	.9999995	.9999997	.9999996	.9999996	.9999998	1.0000000	1.0000000
15	.9999994	.9999992	.9999995	.9999994	.9999994	.9999997	.9999999	.9999999
16	.9999992	.9999989	.9999992	.9999991	.9999991	.9999994	.9999997	.9999998
17	.9999989	.9999986	.9999990	.9999989	.9999989	.9999992	.9999995	.9999996
18	.9999986	.9999983	.9999987	.9999986	.9999986	.9999989	.9999992	.9999993
19	.9999983	.9999980	.9999984	.9999983	.9999983	.9999986	.9999989	.9999990
20	.9999980	.9999977	.9999981	.9999980	.9999980	.9999983	.9999986	.9999987
21	.9999977	.9999974	.9999978	.9999977	.9999977	.9999980	.9999983	.9999984
22	.9999974	.9999971	.9999975	.9999974	.9999974	.9999977	.9999980	.9999981
23	.9999971	.9999968	.9999972	.9999971	.9999971	.9999974	.9999977	.9999978
24	.9999968	.9999965	.9999969	.9999968	.9999968	.9999971	.9999974	.9999975
25	.9999965	.9999962	.9999966	.9999965	.9999965	.9999968	.9999971	.9999972
26	.9999962	.9999959	.9999963	.9999962	.9999962	.9999965	.9999968	.9999969
27	.9999959	.9999956	.9999960	.9999959	.9999959	.9999962	.9999965	.9999966
28	.9999956	.9999953	.9999957	.9999956	.9999956	.9999959	.9999962	.9999963
29	.9999953	.9999950	.9999954	.9999953	.9999953	.9999956	.9999959	.9999960
30	.9999950	.9999947	.9999951	.9999950	.9999950	.9999953	.9999956	.9999957
31	.9999947	.9999944	.9999948	.9999947	.9999947	.9999950	.9999953	.9999954
32	.9999944	.9999941	.9999945	.9999944	.9999944	.9999947	.9999950	.9999951
33	.9999941	.9999938	.9999942	.9999941	.9999941	.9999944	.9999947	.9999948
34	.9999938	.9999935	.9999939	.9999938	.9999938	.9999941	.9999944	.9999945
35	.9999935	.9999932	.9999936	.9999935	.9999935	.9999938	.9999941	.9999942
36	.9999932	.9999929	.9999933	.9999932	.9999932	.9999935	.9999938	.9999939
37	.9999929	.9999926	.9999930	.9999929	.9999929	.9999932	.9999935	.9999936
38	.9999926	.9999923	.9999927	.9999926	.9999926	.9999929	.9999932	.9999933
39	.9999923	.9999920	.9999924	.9999923	.9999923	.9999926	.9999929	.9999930
40	.9999920	.9999917	.9999921	.9999920	.9999920	.9999923	.9999926	.9999927
41	.9999917	.9999914	.9999918	.9999917	.9999917	.9999920	.9999923	.9999924
42	.9999914	.9999911	.9999915	.9999914	.9999914	.9999917	.9999920	.9999921
43	.9999911	.9999908	.9999912	.9999911	.9999911	.9999914	.9999917	.9999918
44	.9999908	.9999905	.9999909	.9999908	.9999908	.9999911	.9999914	.9999915
45	.9999905	.9999902	.9999906	.9999905	.9999905	.9999908	.9999911	.9999912
46	.9999902	.9999899	.9999903	.9999902	.9999902	.9999905	.9999908	.9999909
47	.9999899	.9999896	.9999899	.9999899	.9999899	.9999902	.9999905	.9999906
48	.9999896	.9999893	.9999897	.9999896	.9999896	.9999899	.9999902	.9999903
49	.9999893	.9999890	.9999894	.9999893	.9999893	.9999896	.9999899	.9999900
50	.9999890	.9999887	.9999891	.9999890	.9999890	.9999893	.9999896	.9999897
51	.9999887	.9999884	.9999888	.9999887	.9999887	.9999890	.9999893	.9999894
52	.9999884	.9999881	.9999885	.9999884	.9999884	.9999887	.9999890	.9999891
53	.9999881	.9999878	.9999882	.9999881	.9999881	.9999884	.9999887	.9999888
54	.9999878	.9999875	.9999879	.9999878	.9999878	.9999881	.9999884	.9999885
55	.9999875	.9999872	.9999876	.9999875	.9999875	.9999878	.9999881	.9999882
56	.9999872	.9999869	.9999873	.9999872	.9999872	.9999875	.9999878	.9999879
57	.9999869	.9999866	.9999870	.9999869	.9999869	.9999872	.9999875	.9999876
58	.9999866	.9999863	.9999867	.9999866	.9999866	.9999869	.9999872	.9999873
59	.9999863	.9999860	.9999864	.9999863	.9999863	.9999866	.9999869	.9999870

x	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	1.0000000	1.0000000
8	1.0000000	1.0000000
9	1.0000000	1.0000000
10	1.0000000	1.0000000
11	1.0000000	1.0000000
12	1.0000000	1.0000000
13	1.0000000	1.0000000
14	1.0000000	1.0000000

$$P(x, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

x^p	.49	.50
15	1.0000000	1.0000000
16	.9999999	.9999999
17	.9999993	.9999997
18	.9999975	.9999989
19	.9999921	.9999964
20	.9999764	.9999888
21	.9999342	.9999675
22	.9998881	.9999118
23	.9998578	.9997752
24	.9998236	.9994602
25	.9997870	.9991779
26	.9996091	.9972859
27	.9914315	.9947089
28	.9841473	.9898508
29	.9721497	.9815225
30	.9534680	.9680250
31	.9259460	.9473289
32	.8875614	.9173860
33	.8368523	.8759771
34	.7733681	.821504
35	.6980218	.7556585
36	.6132202	.6777680
37	.5226913	.5912231
38	.4310110	.5000000
39	.3429260	.4087769
40	.2626354	.3222320
41	.1938076	.2443415
42	.1362643	.1778496
43	.0915742	.1240229
44	.0593183	.0827140
45	.0364995	.0526711
46	.0213963	.0319750
47	.0119326	.0184775
48	.0063224	.0101492
49	.0031780	.0052911
50	.0015134	.0026141
51	.0006817	.0012221
52	.0002900	.0005398
53	.0001163	.0002244
54	.0000439	.0000882
55	.0000154	.0000325
56	.0000052	.0000112
57	.0000016	.0000036
58	.0000005	.0000011
59	.0000001	.0000003
60		.0000001

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$$P(n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 76

X	.01	.02	.03	.04	.05	.06	.07	.08
1	.5341192	.7846317	.9012339	.9550620	.9797235	.9909277	.9957556	.9982304
2	.1764734	.4505911	.6690493	.8127583	.8986173	.9469175	.9729541	.9867557
3	.0410015	.1949478	.3997744	.5904089	.7385393	.8415738	.9079743	.9484006
4	.0072475	.0622566	.1943483	.3618830	.5307107	.6757135	.7873305	.8666018
5	.0010358	.0183257	.0733990	.1881082	.3311016	.4825039	.6216075	.7367957
6	.0001201	.0043399	.0267597	.0838433	.1798128	.3048155	.4410853	.5749334
7	.0000180	.0008383	.0078608	.0324349	.0855831	.1707796	.2819991	.4060997
8	.0000010	.0001440	.0081558	.0110147	.0357977	.0851610	.1615794	.2615618
9	.0000001	.0000218	.0004566	.0033168	.0113858	.0388258	.0834037	.1584833
10		.0000029	.0000923	.0008934	.0045317	.0152910	.0388454	.0808189
11		.0000004	.0000168	.0002169	.0013769	.0055714	.0165850	.0390655
12			.0000028	.0000478	.0003800	.0018482	.0063996	.0172018
13			.0000004	.0000096	.0000958	.0004409	.0022718	.0072099
14			.0000001	.0000018	.0000282	.0001564	.0007410	.0028684
15				.0000003	.0000007	.0000403	.0002337	.0009096
16					.0000009	.0000096	.0000685	.0003319
17					.0000002	.0000021	.0000162	.0000871
18						.0000004	.0000009	.0000048
19						.0000001	.0000002	.0000006
20							.0000002	.0000001
21								.0000001
22								.0000001
23								.0000001
24								.0000001
25								.0000001
26								.0000001
27								.0000001
28								.0000001
29								.0000001
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32								.0000001
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73								.0000001
74								.0000001
75								.0000001
76								.0000001

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$$P(n; n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 76

X	.33	.34	.35	.36	.37	.38	.39	.40
37	.0037430	.0037415	.0036599	.0156675	.0045368	.0371587	.0544980	.0778090
38	.0013844	.0008968	.0005760	.0008668	.0139473	.0819406	.0333943	.0492458
39	.0007328	.0013988	.0025427	.0044671	.0075648	.0123673	.0195468	.0299078
40	.0003017	.0006178	.0012136	.0022204	.0037125	.0066504	.0109804	.0173463
41	.0001344	.0002781	.0005317	.0010513	.0019283	.0034093	.0058189	.0096001
42	.0000535	.0001154	.0002307	.0004740	.0009051	.0016651	.0028950	.0050657
43	.0000208	.0000435	.0000882	.0001733	.0003404	.0006742	.0011491	.0021466
44	.0000073	.0000171	.0000385	.0000789	.0001518	.0003025	.0005678	.0010107
45	.0000025	.0000061	.0000143	.0000281	.0000564	.0001141	.0002279	.0004548
46	.0000000	.0000021	.0000050	.0000118	.0000266	.0000576	.0001197	.0002400
47	.0000000	.0000007	.0000017	.0000041	.0000097	.0000218	.0000473	.0000988
48	.0000000	.0000001	.0000005	.0000011	.0000033	.0000077	.0000177	.0000384
49	.0000000	.0000000	.0000000	.0000004	.0000013	.0000037	.0000087	.0000193
50	.0000000	.0000000	.0000000	.0000001	.0000003	.0000009	.0000021	.0000046
51					.0000001	.0000003	.0000007	.0000016
52						.0000001	.0000002	.0000005
53							.0000001	.0000002

X	.41	.42	.43	.44	.45	.46	.47	.48
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000
14	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000
15	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
16	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
17	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
18	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
19	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
20	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
21	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
22	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
23	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
24	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
25	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
26	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
27	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
28	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
29	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
30	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
31	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
32	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
33	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
34	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
35	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
36	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
37	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
38	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
39	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
40	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
41	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
42	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
43	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
44	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
45	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
46	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
47	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
48	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
49	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
50	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
51	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
52	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
53	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
54	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
55	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
56	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
57	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
58	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
59	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999

X	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	1.0000000	1.0000000
8	1.0000000	1.0000000
9	1.0000000	1.0000000
10	1.0000000	1.0000000
11	1.0000000	1.0000000
12	1.0000000	1.0000000
13	1.0000000	1.0000000
14	1.0000000	1.0000000

$$F(x, n, p) = \sum_{r=0}^x \binom{n}{r} p^r (1-p)^{n-r}$$

n = 75

x	.49	.50
15	1.0000000	1.0000000
16	.9999999	1.0000000
17	.9999998	.9999999
18	.9999996	.9999997
19	.9999992	.9999994
20	.9999984	.9999988
21	.9999968	.9999972
22	.9999944	.9999948
23	.9999904	.9999904
24	.9999848	.9999848
25	.9999776	.9999776
26	.9999688	.9999688
27	.9999584	.9999584
28	.9999464	.9999464
29	.9999328	.9999328
30	.9999176	.9999176
31	.9999008	.9999008
32	.9998824	.9998824
33	.9998624	.9998624
34	.9998408	.9998408
35	.9998176	.9998176
36	.9997928	.9997928
37	.9997664	.9997664
38	.9997384	.9997384
39	.9997088	.9997088
40	.9996776	.9996776
41	.9996448	.9996448
42	.9996104	.9996104
43	.9995744	.9995744
44	.9995368	.9995368
45	.9994976	.9994976
46	.9994568	.9994568
47	.9994144	.9994144
48	.9993704	.9993704
49	.9993248	.9993248
50	.9992776	.9992776
51	.9992288	.9992288
52	.9991784	.9991784
53	.9991264	.9991264
54	.9990728	.9990728
55	.9990176	.9990176
56	.9989608	.9989608
57	.9989024	.9989024
58	.9988424	.9988424
59	.9987808	.9987808
60	.9987176	.9987176
61	.9986528	.9986528
62	.9985864	.9985864
63	.9985184	.9985184
64	.9984488	.9984488
65	.9983776	.9983776
66	.9983048	.9983048
67	.9982304	.9982304
68	.9981544	.9981544
69	.9980768	.9980768
70	.9980000	.9980000
71	.9979248	.9979248
72	.9978512	.9978512
73	.9977800	.9977800
74	.9977112	.9977112
75	.9976448	.9976448

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$$P(r, n, p) = \sum_{i=0}^n \binom{n}{i} p^i (1-p)^{n-i}$$

n = 77

	.01	.02	.03	.04	.05	.06	.07	.08
1	.5367780	.7889391	.9041872	.9568393	.9807373	.9914780	.9968573	.9983760
2	.1600494	.4572719	.6760144	.8184305	.9026786	.9495881	.9745454	.9847118
3	.0423362	.2000607	.4078507	.6593029	.8465432	.9478944	.9818588	.9914814
4	.0075851	.0688304	.2808111	.5710241	.8411097	.9485661	.9875756	.9973147
5	.0010674	.0195843	.0818775	.2450892	.5410884	.8490968	.9633088	.9874180
6	.0001890	.0045216	.0283089	.0860112	.2173772	.5135570	.8455588	.9678568
7	.0000130	.0009012	.0084270	.0344912	.0903003	.2188878	.5231981	.8463800
8	.0000017	.0001579	.0021911	.0118715	.0384772	.0908981	.2170068	.5231969
9	.0000001	.0000048	.0005034	.0036248	.0146114	.0408533	.0880760	.2168094
10		.0000033	.0001038	.0009994	.0049813	.0166569	.0420375	.0885514
11			.0000190	.0002440	.0015347	.0061547	.0160944	.0424087
12		.0000004	.0000038	.0000545	.0004298	.0020716	.0071084	.0190848
13			.0000005	.0000111	.0001100	.0006388	.0028605	.0078418
14			.0000001	.0000001	.0000028	.0001807	.0008489	.0029779
15				.0000004	.0000052	.0000472	.0002859	.0010471
16				.0000001	.0000011	.0000114	.0000737	.0003413
17					.0000008	.0000086	.0000519	.0001034
18						.0000005	.0000048	.0000282
19						.0000001	.0000011	.0000077
20							.0000003	.0000019
21								.0000004
22								.0000001
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$$i(c, n, r) = \sum_{k=0}^n \binom{n}{k} (-1)^k (1-r)^{n-k} r^k$$

n = 77

	.17	.18	.19	.20	.21	.22	.23	.24
35			.0000001	.0000004	.0000014	.0000042	.0000116	.0000312
36				.0000001	.0000004	.0000013	.0000040	.0000112
37					.0000001	.0000004	.0000013	.0000038
38						.0000004	.0000013	.0000012
39							.0000001	.0000004
40								.0000001
	.25	.26	.27	.28	.29	.30	.31	.32
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	.9999999	.9999997	.9999997	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	.9999999	.9999997	.9999997	.9999996	.9999996	.9999996	1.0000000	1.0000000
6	.9999975	.9999989	.9999950	.9999978	.9999991	.9999996	.9999990	.9999999
7	.9999978	.9999999	.9999969	.9999993	.9999992	.9999997	.9999991	.9999996
8	.9999914	.9999915	.9999988	.9999959	.9999971	.9999993	.9999996	.9999980
9	.9999954	.9999996	.9999983	.9999920	.9999927	.9999960	.9999980	.9999916
10	.9999905	.9999960	.9999933	.9999906	.9999949	.9999960	.9999935	.9999985
11	.9999470	.9999540	.9999492	.9999551	.9999424	.9999480	.9999791	.9999844
12	.9999340	.9999341	.9999349	.9999370	.9999399	.9999306	.9999390	.9999388
13	.9999277	.9999278	.9999275	.9999285	.9999285	.9999230	.9999230	.9999123
14	.9999160	.9999160	.9999161	.9999161	.9999161	.9999161	.9999161	.9999161
15	.9999082	.9999082	.9999082	.9999082	.9999082	.9999082	.9999082	.9999082
16	.9998951	.9998951	.9998951	.9998951	.9998951	.9998951	.9998951	.9998951
17	.9998820	.9998820	.9998820	.9998820	.9998820	.9998820	.9998820	.9998820
18	.9998689	.9998689	.9998689	.9998689	.9998689	.9998689	.9998689	.9998689
19	.9998558	.9998558	.9998558	.9998558	.9998558	.9998558	.9998558	.9998558
20	.9998427	.9998427	.9998427	.9998427	.9998427	.9998427	.9998427	.9998427
21	.9998296	.9998296	.9998296	.9998296	.9998296	.9998296	.9998296	.9998296
22	.9998165	.9998165	.9998165	.9998165	.9998165	.9998165	.9998165	.9998165
23	.9998034	.9998034	.9998034	.9998034	.9998034	.9998034	.9998034	.9998034
24	.9997903	.9997903	.9997903	.9997903	.9997903	.9997903	.9997903	.9997903
25	.9997772	.9997772	.9997772	.9997772	.9997772	.9997772	.9997772	.9997772
26	.9997641	.9997641	.9997641	.9997641	.9997641	.9997641	.9997641	.9997641
27	.9997510	.9997510	.9997510	.9997510	.9997510	.9997510	.9997510	.9997510
28	.9997379	.9997379	.9997379	.9997379	.9997379	.9997379	.9997379	.9997379
29	.9997248	.9997248	.9997248	.9997248	.9997248	.9997248	.9997248	.9997248
30	.9997117	.9997117	.9997117	.9997117	.9997117	.9997117	.9997117	.9997117
31	.9996986	.9996986	.9996986	.9996986	.9996986	.9996986	.9996986	.9996986
32	.9996855	.9996855	.9996855	.9996855	.9996855	.9996855	.9996855	.9996855
33	.9996724	.9996724	.9996724	.9996724	.9996724	.9996724	.9996724	.9996724
34	.9996593	.9996593	.9996593	.9996593	.9996593	.9996593	.9996593	.9996593
35	.9996462	.9996462	.9996462	.9996462	.9996462	.9996462	.9996462	.9996462
36	.9996331	.9996331	.9996331	.9996331	.9996331	.9996331	.9996331	.9996331
37	.9996200	.9996200	.9996200	.9996200	.9996200	.9996200	.9996200	.9996200
38	.9996069	.9996069	.9996069	.9996069	.9996069	.9996069	.9996069	.9996069
39	.9995938	.9995938	.9995938	.9995938	.9995938	.9995938	.9995938	.9995938
40	.9995807	.9995807	.9995807	.9995807	.9995807	.9995807	.9995807	.9995807
41	.9995676	.9995676	.9995676	.9995676	.9995676	.9995676	.9995676	.9995676
42	.9995545	.9995545	.9995545	.9995545	.9995545	.9995545	.9995545	.9995545
43	.9995414	.9995414	.9995414	.9995414	.9995414	.9995414	.9995414	.9995414
44	.9995283	.9995283	.9995283	.9995283	.9995283	.9995283	.9995283	.9995283
45	.9995152	.9995152	.9995152	.9995152	.9995152	.9995152	.9995152	.9995152
46	.9995021	.9995021	.9995021	.9995021	.9995021	.9995021	.9995021	.9995021
47	.9994890	.9994890	.9994890	.9994890	.9994890	.9994890	.9994890	.9994890
	.33	.34	.35	.36	.37	.38	.39	.40
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
8	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
9	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
10	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
11	.9999977	.9999977	.9999977	.9999977	.9999977	.9999977	.9999977	.9999977
12	.9999955	.9999955	.9999955	.9999955	.9999955	.9999955	.9999955	.9999955
13	.9999933	.9999933	.9999933	.9999933	.9999933	.9999933	.9999933	.9999933
14	.9999911	.9999911	.9999911	.9999911	.9999911	.9999911	.9999911	.9999911
15	.9999889	.9999889	.9999889	.9999889	.9999889	.9999889	.9999889	.9999889
16	.9999867	.9999867	.9999867	.9999867	.9999867	.9999867	.9999867	.9999867
17	.9999845	.9999845	.9999845	.9999845	.9999845	.9999845	.9999845	.9999845
18	.9999823	.9999823	.9999823	.9999823	.9999823	.9999823	.9999823	.9999823
19	.9999801	.9999801	.9999801	.9999801	.9999801	.9999801	.9999801	.9999801
20	.9999779	.9999779	.9999779	.9999779	.9999779	.9999779	.9999779	.9999779
21	.9999757	.9999757	.9999757	.9999757	.9999757	.9999757	.9999757	.9999757
22	.9999735	.9999735	.9999735	.9999735	.9999735	.9999735	.9999735	.9999735
23	.9999713	.9999713	.9999713	.9999713	.9999713	.9999713	.9999713	.9999713
24	.9999691	.9999691	.9999691	.9999691	.9999691	.9999691	.9999691	.9999691
25	.9999669	.9999669	.9999669	.9999669	.9999669	.9999669	.9999669	.9999669
26	.9999647	.9999647	.9999647	.9999647	.9999647	.9999647	.9999647	.9999647
27	.9999625	.9999625	.9999625	.9999625	.9999625	.9999625	.9999625	.9999625
28	.9999603	.9999603	.9999603	.9999603	.9999603	.9999603	.9999603	.9999603
29	.9999581	.9999581	.9999581	.9999581	.9999581	.9999581	.9999581	.9999581
30	.9999559	.9999559	.9999559	.9999559	.9999559	.9999559	.9999559	.9999559
31	.9999537	.9999537	.9999537	.9999537	.9999537	.9999537	.9999537	.9999537
32	.9999515	.9999515	.9999515	.9999515	.9999515	.9999515	.9999515	.9999515
33	.9999493	.9999493	.9999493	.9999493	.9999493	.9999493	.9999493	.9999493
34	.9999471	.9999471	.9999471	.9999471	.9999471	.9999471	.9999471	.9999471
35	.9999449	.9999449	.9999449	.9999449	.9999449	.9999449	.9999449	.9999449
36	.9999427	.9999427	.9999427	.9999427	.9999427	.9999427	.9999427	.9999427

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 77

r	.49	.50
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	.99999999	1.00000000
17	.99999997	.99999999
18	.99999989	.99999996
19	.99999965	.99999985
20	.99999893	.99999951
21	.99999692	.99999854
22	.99999167	.99999589
23	.99997885	.99998166
24	.99994938	.99997106
25	.99988567	.99993684
26	.99975590	.99986005
27	.99956633	.99970646
28	.99905399	.99941636
29	.99827757	.99889833
30	.99701712	.99802302
31	.99507950	.99662254
32	.99257002	.99449922
33	.98830881	.99144695
34	.98251533	.98728477
35	.97690131	.98189841
36	.96940555	.97528089
37	.96100343	.96786044
38	.95058813	.95900535
39	.93801125	.95000000
40	.9231916	.94099465
41	.9058550	.93243956
42	.8850662	.92471711
43	.8612166	.91810159
44	.8341147	.91271523
45	.8042240	.90855305
46	.770499	.90550078
47	.7325610	.90337746
48	.6907456	.90197698
49	.6458515	.90110167
50	.6005000	.90058364
51	.556968	.90029354
52	.5157795	.90013995
53	.4783389	.90006316
54	.444392	.90002694
55	.414539	.90001084
56	.3890197	.90000411
57	.3670067	.90000146
58	.3480022	.90000049
59	.3310007	.90000015
60	.3160002	.90000004
61		.90000001

$$P(c, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 78

	.33	.34	.35	.36	.37	.38	.39	.40
36	.0106378	.0173912	.0273845	.0416058	.0610945	.0868425	.1196729	.1601097
37	.0256514	.0426312	.0677805	.0942339	.0138007	.0560491	.0800473	.1187066
38	.0028697	.0050920	.0086679	.0142723	.0226166	.0346253	.0512893	.0736087
39	.0013894	.0025705	.0045672	.0078077	.0128637	.0204579	.0314515	.0468062
40	.0006415	.0012378	.0022915	.0040781	.0069890	.0115520	.0184431	.0284797
41	.0002824	.0005684	.0010968	.0020327	.0036250	.0062300	.0101342	.0165675
42	.0001185	.0002488	.0005005	.0009664	.0017939	.0032069	.005291	.0082071
43	.0000473	.0001038	.0002177	.0004379	.0008465	.0015745	.0028228	.0048844
44	.0000180	.0000412	.0000902	.0001891	.0003806	.0007369	.0013742	.0024716
45	.0000065	.0000156	.0000356	.0000777	.0001630	.0003286	.0006375	.0011922
46	.0000022	.0000056	.0000133	.0000304	.0000664	.0001395	.0002816	.0005477
47	.0000007	.0000019	.0000048	.0000113	.0000258	.0000563	.0001183	.0002395
48	.0000002	.0000006	.0000016	.0000040	.0000095	.0000216	.0000473	.0000994
49	.0000001	.0000003	.0000008	.0000021	.0000053	.0000127	.0000282	.0000593
50		.0000001	.0000002	.0000004	.0000011	.0000027	.0000065	.0000140
51				.0000001	.0000003	.0000009	.0000022	.0000052
52					.0000001	.0000003	.0000007	.0000018
53						.0000001	.0000002	.0000006
54							.0000001	.0000002

	.41	.42	.43	.44	.45	.46	.47	.48
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
12	.9999998	.9999998	.9999998	.9999998	.9999998	.9999998	.9999998	.9999998
13	.9999996	.9999996	.9999996	.9999996	.9999996	.9999996	.9999996	.9999996
14	.9999994	.9999994	.9999994	.9999994	.9999994	.9999994	.9999994	.9999994
15	.9999992	.9999992	.9999992	.9999992	.9999992	.9999992	.9999992	.9999992
16	.9999990	.9999990	.9999990	.9999990	.9999990	.9999990	.9999990	.9999990
17	.9999988	.9999988	.9999988	.9999988	.9999988	.9999988	.9999988	.9999988
18	.9999986	.9999986	.9999986	.9999986	.9999986	.9999986	.9999986	.9999986
19	.9999984	.9999984	.9999984	.9999984	.9999984	.9999984	.9999984	.9999984
20	.9999982	.9999982	.9999982	.9999982	.9999982	.9999982	.9999982	.9999982
21	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980
22	.9999978	.9999978	.9999978	.9999978	.9999978	.9999978	.9999978	.9999978
23	.9999976	.9999976	.9999976	.9999976	.9999976	.9999976	.9999976	.9999976
24	.9999974	.9999974	.9999974	.9999974	.9999974	.9999974	.9999974	.9999974
25	.9999972	.9999972	.9999972	.9999972	.9999972	.9999972	.9999972	.9999972
26	.9999970	.9999970	.9999970	.9999970	.9999970	.9999970	.9999970	.9999970
27	.9999968	.9999968	.9999968	.9999968	.9999968	.9999968	.9999968	.9999968
28	.9999966	.9999966	.9999966	.9999966	.9999966	.9999966	.9999966	.9999966
29	.9999964	.9999964	.9999964	.9999964	.9999964	.9999964	.9999964	.9999964
30	.9999962	.9999962	.9999962	.9999962	.9999962	.9999962	.9999962	.9999962
31	.9999960	.9999960	.9999960	.9999960	.9999960	.9999960	.9999960	.9999960
32	.9999958	.9999958	.9999958	.9999958	.9999958	.9999958	.9999958	.9999958
33	.9999956	.9999956	.9999956	.9999956	.9999956	.9999956	.9999956	.9999956
34	.9999954	.9999954	.9999954	.9999954	.9999954	.9999954	.9999954	.9999954
35	.9999952	.9999952	.9999952	.9999952	.9999952	.9999952	.9999952	.9999952
36	.9999950	.9999950	.9999950	.9999950	.9999950	.9999950	.9999950	.9999950
37	.9999948	.9999948	.9999948	.9999948	.9999948	.9999948	.9999948	.9999948
38	.9999946	.9999946	.9999946	.9999946	.9999946	.9999946	.9999946	.9999946
39	.9999944	.9999944	.9999944	.9999944	.9999944	.9999944	.9999944	.9999944
40	.9999942	.9999942	.9999942	.9999942	.9999942	.9999942	.9999942	.9999942
41	.9999940	.9999940	.9999940	.9999940	.9999940	.9999940	.9999940	.9999940
42	.9999938	.9999938	.9999938	.9999938	.9999938	.9999938	.9999938	.9999938
43	.9999936	.9999936	.9999936	.9999936	.9999936	.9999936	.9999936	.9999936
44	.9999934	.9999934	.9999934	.9999934	.9999934	.9999934	.9999934	.9999934
45	.9999932	.9999932	.9999932	.9999932	.9999932	.9999932	.9999932	.9999932
46	.9999930	.9999930	.9999930	.9999930	.9999930	.9999930	.9999930	.9999930
47	.9999928	.9999928	.9999928	.9999928	.9999928	.9999928	.9999928	.9999928
48	.9999926	.9999926	.9999926	.9999926	.9999926	.9999926	.9999926	.9999926
49	.9999924	.9999924	.9999924	.9999924	.9999924	.9999924	.9999924	.9999924
50	.9999922	.9999922	.9999922	.9999922	.9999922	.9999922	.9999922	.9999922
51	.9999920	.9999920	.9999920	.9999920	.9999920	.9999920	.9999920	.9999920
52	.9999918	.9999918	.9999918	.9999918	.9999918	.9999918	.9999918	.9999918
53	.9999916	.9999916	.9999916	.9999916	.9999916	.9999916	.9999916	.9999916
54	.9999914	.9999914	.9999914	.9999914	.9999914	.9999914	.9999914	.9999914
55	.9999912	.9999912	.9999912	.9999912	.9999912	.9999912	.9999912	.9999912
56	.9999910	.9999910	.9999910	.9999910	.9999910	.9999910	.9999910	.9999910
57	.9999908	.9999908	.9999908	.9999908	.9999908	.9999908	.9999908	.9999908
58	.9999906	.9999906	.9999906	.9999906	.9999906	.9999906	.9999906	.9999906
59	.9999904	.9999904	.9999904	.9999904	.9999904	.9999904	.9999904	.9999904
60	.9999902	.9999902	.9999902	.9999902	.9999902	.9999902	.9999902	.9999902

	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	1.0000000	1.0000000
8	1.0000000	1.0000000
9	1.0000000	1.0000000
10	1.0000000	1.0000000
11	1.0000000	1.0000000
12	1.0000000	1.0000000

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 78

	.49	.50
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	.99999998	.99999999
18	.99999993	.99999997
19	.99999977	.99999990
20	.99999930	.99999968
21	.99999791	.99999902
22	.99999424	.99999721
23	.99998513	.99999253
24	.99996382	.99998111
25	.99991688	.99995495
26	.99981948	.99989844
27	.99962872	.99978326
28	.99927574	.99956141
29	.99865801	.99915735
30	.9763474	.9846068
31	.9602893	.9732278
32	.9364003	.9556088
33	.9026893	.9227302
34	.8575410	.8936586
35	.8001292	.8459159
36	.7307847	.7858965
37	.6512048	.7142066
38	.5644134	.6328290
39	.4744422	.5450268
40	.3857829	.4549732
41	.3027299	.3671710
42	.2287727	.2857934
43	.1661749	.2141035
44	.1158227	.1540841
45	.0773404	.1063414
46	.0494053	.0702691
47	.0301506	.0443912
48	.0175552	.0267722
49	.0097366	.0153912
50	.0051423	.0084265
51	.0025804	.0041859
52	.0012290	.0021674
53	.0005548	.0010156
54	.0002371	.0004505
55	.0000927	.0001899
56	.0000365	.0000747
57	.0000131	.0000279
58	.0000044	.0000099
59	.0000014	.0000032
60	.0000004	.0000010
61	.0000001	.0000003
62		.0000001

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$$F(n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 79

x	.33	.34	.35	.36	.37	.38	.39	.40
37	.0072996	.0122694	.0198419	.0309294	.0464498	.0677500	.0955013	.1305662
38	.0017690	.0063357	.0111703	.0181068	.0283113	.0427663	.0625049	.0885134
39	.0010779	.0034201	.0060094	.0101349	.0164723	.0256415	.0391883	.0578272
40	.0008883	.0016909	.0030880	.0054208	.0091626	.0149367	.0235164	.0358103
41	.0004009	.0007960	.0015149	.0027691	.0048696	.0082534	.0134967	.0213324
42	.0001726	.0003575	.0007022	.0013502	.0024714	.0041557	.0074031	.0121513
43	.0000708	.0001531	.0003167	.0006302	.0011970	.0021548	.0038781	.0066135
44	.0000277	.0000635	.0001340	.0002787	.0005530	.0010552	.0019391	.0034367
45	.0000103	.0000243	.0000547	.0001178	.0002435	.0004837	.0009248	.0017040
46	.0000037	.0000090	.0000211	.0000474	.0001022	.0002113	.0004204	.0008055
47	.0000012	.0000032	.0000078	.0000182	.0000408	.0000879	.0001820	.0003628
48	.0000004	.0000011	.0000027	.0000066	.0000155	.0000348	.0000750	.0001535
49	.0000001	.0000003	.0000009	.0000023	.0000056	.0000131	.0000284	.0000634
50		.0000001	.0000003	.0000008	.0000019	.0000047	.0000109	.0000246
51			.0000001	.0000002	.0000006	.0000016	.0000039	.0000091
52				.0000001	.0000002	.0000005	.0000013	.0000032
53					.0000001	.0000002	.0000004	.0000010
54						.0000001	.0000001	.0000003
55							.0000001	.0000001

x	.41	.42	.43	.44	.45	.46	.47	.48
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13	.9999993	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
14	.9999975	.9999999	.9999995	.9999999	.9999999	1.0000000	1.0000000	1.0000000
15	.9999915	.9999961	.9999983	.9999993	.9999997	.9999999	1.0000000	1.0000000
16	.9999734	.9999874	.9999942	.9999974	.9999989	.9999995	.9999998	.9999999
17	.9999230	.9999622	.9999819	.9999916	.9999962	.9999983	.9999993	.9999997
18	.9997933	.9998945	.9999476	.9999746	.9999881	.9999945	.9999976	.9999990
19	.9994830	.9997257	.9998583	.9999288	.9999652	.9999834	.9999923	.9999965
20	.9987905	.9993333	.9996422	.9998131	.9999050	.9999531	.9999775	.9999885
21	.9977470	.9984807	.9991530	.9995404	.9997574	.9998755	.9999379	.9999699
22	.9945286	.9967462	.9981152	.9989305	.9994181	.9996897	.9998392	.9999190
23	.9893652	.9933348	.9960541	.9976917	.9986061	.9992726	.9996085	.9997952
24	.9804728	.9874922	.9921990	.9952639	.9972020	.9983921	.9991015	.9995121
25	.9660542	.9774513	.9854130	.9908129	.9943687	.9966418	.9980526	.9989022
26	.9440108	.9614550	.9741507	.9831190	.9892606	.9933618	.9960060	.9976638
27	.9121958	.9373970	.9565049	.9705637	.9806022	.9875586	.9922367	.9952894
28	.8687972	.9031946	.9303744	.9511992	.9666833	.9778547	.9856754	.9909872
29	.8127809	.8572100	.9037656	.9229428	.9455138	.9625032	.9748695	.9836119
30	.7443416	.7986430	.8451973	.8838998	.9151025	.9395052	.9580173	.9716394
31	.6650665	.7279587	.7841321	.8327700	.8736051	.9068338	.9331100	.9532800
32	.5779895	.6470530	.7113168	.7692712	.8199385	.8628895	.8981974	.9263452
33	.4878228	.5591727	.6289206	.6944334	.7540750	.8067128	.8511750	.8891339
34	.3973885	.4685376	.5403918	.6106863	.6771248	.7385569	.7931025	.8402127
35	.3129282	.3797409	.4500357	.5216609	.5923662	.6600068	.7227301	.7791165
36	.2374660	.2970681	.3623971	.4317372	.5029940	.5739757	.6424941	.7066068
37	.1733729	.2238979	.2815920	.3453623	.4136219	.4844043	.5555290	.6248010
38	.1216111	.1623204	.2107486	.2665001	.3306416	.3957295	.4659046	.5370426
39	.0810546	.1130361	.1516797	.1980145	.2517933	.3122401	.3780595	.4475076
40	.0520105	.0755172	.1048338	.1414449	.1856930	.2374727	.2961642	.3606817
41	.0326273	.0483484	.0694939	.0969974	.1316110	.1737818	.2235401	.2804193
42	.0192858	.0296341	.0441345	.0637779	.0895205	.1231732	.1622792	.2099976
43	.0108976	.0173730	.0268256	.0401627	.0583627	.0823972	.1131273	.1511639
44	.0058819	.0097332	.0155901	.0241959	.0364270	.0532419	.0756218	.1046497
45	.0030301	.0052068	.0086552	.0139332	.0217428	.0329215	.0484404	.0691890
46	.0014888	.0026574	.0045862	.0074609	.0112383	.0174582	.0266060	.0403592
47	.0006971	.0012929	.0023174	.0040183	.0067473	.0109813	.0173379	.0265374
48	.0003108	.0005992	.0011157	.0020088	.0035009	.0055112	.0084780	.0133768
49	.0001318	.0002642	.0005113	.0009552	.0017302	.0030319	.0051495	.0084480
50	.0000532	.0001108	.0002328	.0004330	.0008136	.0014801	.0026088	.0044588
51	.0000204	.0000441	.0000923	.0001863	.0003617	.0006870	.0012570	.0022294
52	.0000074	.0000167	.0000363	.0000761	.0001543	.0003029	.0005754	.0010592
53	.0000025	.0000060	.0000135	.0000295	.0000621	.0001266	.0002499	.0004776
54	.0000008	.0000020	.0000048	.0000108	.0000237	.0000502	.0001028	.0002041
55	.0000003	.0000006	.0000016	.0000038	.0000085	.0000188	.0000400	.0000826
56	.0000001	.0000002	.0000005	.0000012	.0000029	.0000067	.0000147	.0000316
57		.0000001	.0000001	.0000004	.0000010	.0000023	.0000051	.0000114
58				.0000001	.0000003	.0000007	.0000017	.0000039
59					.0000001	.0000002	.0000005	.0000012
60						.0000001	.0000001	.0000004
61								.0000001

x	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	1.0000000	1.0000000
8	1.0000000	1.0000000
9	1.0000000	1.0000000
10	1.0000000	1.0000000

$$P(o, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 79

	.49	.50
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	.99999999	1.00000000
18	.99999998	.99999998
19	.99999995	.99999994
20	.99999988	.99999979
21	.99999978	.99999963
22	.99999964	.99999942
23	.99999946	.99999917
24	.99999923	.99999888
25	.99999895	.99999853
26	.99999861	.99999812
27	.99999821	.99999767
28	.99999776	.99999718
29	.99999727	.99999668
30	.99999674	.99999615
31	.99999617	.99999558
32	.99999557	.99999495
33	.99999493	.99999432
34	.99999425	.99999363
35	.99999353	.99999288
36	.99999277	.99999210
37	.99999198	.99999132
38	.99999115	.99999051
39	.99999029	.99998960
40	.99998941	.99998863
41	.99998850	.99998767
42	.99998757	.99998675
43	.99998662	.99998572
44	.99998565	.99998478
45	.99998467	.99998382
46	.99998367	.99998285
47	.99998265	.99998187
48	.99998161	.99998088
49	.99998055	.99997988
50	.99997947	.99997887
51	.99997837	.99997785
52	.99997725	.99997682
53	.99997611	.99997578
54	.99997495	.99997473
55	.99997377	.99997359
56	.99997257	.99997241
57	.99997135	.99997123
58	.99997011	.99997000
59	.99996885	.99996875
60	.99996757	.99996757
61	.99996627	.99996630
62	.99996495	.99996495

$$P(n, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 100

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.3524748	.8013511	.9125542	.9616321	.9834846	.9929160	.9968875	.9987323
2	.1908419	.4770863	.6761936	.8346056	.9139462	.957474	.9766619	.9895133
3	.0465532	.2153811	.4318767	.6852121	.8793795	.9655543	.9824663	.9956220
4	.0088598	.0768550	.2193333	.3983691	.5715814	.7142184	.8149332	.8911374
5	.0018909	.0283354	.0927938	.2164281	.3711208	.5822552	.7666707	.8765001
6	.0001594	.0054495	.0333064	.1011891	.2107753	.3478372	.4918886	.6249795
7	.0000168	.0011367	.0103089	.0411718	.1052883	.2038866	.3273266	.4442831
8	.0000015	.0002063	.0027898	.0147357	.0465915	.1067527	.1944395	.3088853
9	.0000001	.0000370	.0006678	.0046844	.0184031	.0501775	.1065308	.1807844
10		.0000047	.0001428	.0013340	.0065343	.0212879	.0582964	.1051850
11		.0000006	.0000275	.0003428	.0020991	.0081955	.0234466	.0533900
12		.0000001	.0000048	.0000280	.0001136	.0004774	.0019596	.0042395
13			.0000008	.0000171	.0000641	.0002556	.0009124	.0017648
14			.0000001	.0000033	.0000140	.0000573	.0002152	.0004271
15				.0000006	.0000029	.0000119	.0000407	.0001590
16				.0000001	.0000019	.0000080	.0000280	.0000933
17					.0000004	.0000015	.0000051	.0000189
18					.0000001	.0000008	.0000028	.0000103
19						.0000002	.0000008	.0000036
20							.0000005	.0000020
21							.0000001	.0000009
22								.0000008

x	.09	.10	.11	.12	.13	.14	.15	.16
1	.9994712	.9997815	.9999106	.9999638	.9999855	.9999948	.9999977	.9999991
2	.9999871	.9999933	.9999970	.9999996	.9999999	.9999999	.9999999	.9999999
3	.9999945	.9999963	.9999972	.9999978	.9999982	.9999985	.9999987	.9999988
4	.9999990	.9999997	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
5	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
6	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
7	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
8	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
9	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
10	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
11	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
12	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
13	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
14	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
15	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
16	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
17	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
18	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
19	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
20	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
21	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
22	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
23	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
24	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
25	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
26	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
27	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
28	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
29	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
30	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
31	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
32	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
33	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999

x	.17	.18	.19	.20	.21	.22	.23	.24
1	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
2	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
3	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
4	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
5	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
6	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
7	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
8	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
9	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
10	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
11	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
12	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
13	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
14	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
15	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
16	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
17	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
18	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
19	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
20	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
21	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
22	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
23	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
24	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
25	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
26	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
27	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
28	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
29	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
30	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
31	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
32	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
33	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
34	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999

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$$P(c, n, r) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 80

r	.49	.50
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	.99999999	1.00000000
18	.99999997	.99999999
19	.99999990	.99999996
20	.99999968	.99999986
21	.99999904	.99999957
22	.99999728	.99999874
23	.99999275	.99999649
24	.99998178	.99999084
25	.99995673	.99997742
26	.99990282	.99994736
27	.99979325	.99983777
28	.99958271	.99956559
29	.99919982	.99915886
30	.9854017	.9908420
31	.9746276	.9835037
32	.9579314	.9716678
33	.9333679	.9535441
34	.8990403	.9271823
35	.8534483	.8907410
36	.7958773	.8428467
37	.7267356	.7829789
38	.6477375	.7117847
39	.5618505	.6312228
40	.4729840	.5444639
41	.3854679	.4555361
42	.3034347	.3687772
43	.2302482	.2882153
44	.1681080	.2170211
45	.1179030	.1571533
46	.0793141	.1092590
47	.0511043	.0728177
48	.0314976	.0464559
49	.0185465	.0283322
50	.0104204	.0164963
51	.0055797	.0091580
52	.0028440	.0048414
53	.0013781	.0024341
54	.0006340	.0011623
55	.0002764	.0005264
56	.0001143	.0002258
57	.0000446	.0000916
58	.0000164	.0000351
59	.0000057	.0000126
60	.0000019	.0000043
61	.0000006	.0000014
62	.0000002	.0000004
63		.0000001

$$P(n, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 81

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.5549580	.8053241	.9151776	.9633588	.9843104	.9933418	.9972003	.9988337
2	.1944582	.4835130	.7026844	.8396947	.9174231	.9589176	.9801308	.9906188
3	.0479961	.2208100	.4398063	.6335878	.7766078	.8710258	.9287398	.9680453
4	.0090381	.0726295	.2257096	.4074428	.5814428	.7362930	.8264764	.8966168
5	.0013646	.0234454	.0965895	.2237000	.3811418	.5394127	.6773683	.7856711
6	.0001709	.0057876	.0350910	.1057984	.2187926	.3586622	.5040675	.6371011
7	.0000182	.0012230	.0109988	.0435725	.1105598	.2128536	.3388417	.4734888
8	.0000017	.0002249	.0030154	.0157931	.0495262	.1125308	.2055951	.3209971
9	.0000001	.0000365	.0007315	.0050865	.0198125	.0535720	.1282139	.2483678
10		.0000053	.0001585	.0014680	.0071277	.0230213	.0561858	.1118706
11		.0000007	.0000309	.0003825	.0023269	.0088810	.0254916	.0577176
12		.0000001	.0000055	.0000905	.0006879	.0031965	.0105722	.0273235
13			.0000009	.0000196	.0001865	.0010427	.0040322	.0119062
14			.0000001	.0000039	.0000465	.0003130	.0014165	.0041668
15				.0000007	.0000107	.0000868	.0004602	.0017851
16				.0000001	.0000023	.0000223	.0001387	.0006178
17					.0000005	.0000053	.0000389	.0001991
18					.0000001	.0000012	.0000102	.0000599
19						.0000002	.0000025	.0000169
20							.0000006	.0000044
21							.0000001	.0000011
22								.0000003
23								.0000001
24								
25								
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$$F(z, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 81

	.33	.34	.35	.36	.37	.38	.39	.40
32	.1304551	.1760250	.2299802	.2915215	.3592148	.4310908	.5048197	.5779369
33	.0878906	.1230691	.1666125	.2185087	.2781041	.3441539	.4148357	.4879318
34	.0567614	.0825620	.1159479	.1575153	.2073912	.2650354	.3294119	.3980358
35	.0351157	.0531023	.0774336	.1090842	.1487243	.1955761	.2493068	.3114980
36	.0207991	.0327228	.0495848	.0723014	.1024717	.1408313	.1861089	.2399106
37	.0117899	.0193080	.0294239	.0442076	.0667619	.0961046	.1320392	.1759119
38	.0063916	.0109031	.0178757	.0282194	.0432961	.0632116	.0889779	.1214116
39	.0033134	.0058897	.0100521	.0165034	.0261092	.0398681	.0588475	.0840866
40	.0016418	.0030422	.0054073	.0092372	.0151918	.0240935	.0369032	.0546649
41	.0007773	.0015019	.0027013	.0049456	.0084894	.0139417	.0221717	.0340730
42	.0003515	.0007084	.0013672	.0025316	.0045055	.0077196	.0127553	.0203437
43	.0001518	.0003191	.0006421	.0012384	.0022939	.0040877	.0070184	.0116846
44	.0000625	.0001372	.0002879	.0005786	.0011159	.0020498	.0036928	.0063539
45	.0000246	.0000563	.0001232	.0002581	.0005183	.0010001	.0018566	.0033218
46	.0000092	.0000220	.0000503	.0001098	.0002298	.0004615	.0008914	.0016578
47	.0000033	.0000082	.0000198	.0000446	.0000972	.0002038	.0004084	.0007899
48	.0000011	.0000029	.0000073	.0000172	.0000392	.0000853	.0001784	.0003591
49	.0000004	.0000010	.0000026	.0000064	.0000150	.0000341	.0000743	.0001555
50	.0000001	.0000003	.0000009	.0000022	.0000055	.0000130	.0000295	.0000648
51		.0000001	.0000003	.0000007	.0000019	.0000047	.0000111	.0000252
52			.0000001	.0000002	.0000006	.0000016	.0000040	.0000094
53				.0000001	.0000002	.0000005	.0000014	.0000033
54					.0000001	.0000002	.0000004	.0000011
55						.0000001	.0000001	.0000004
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$$H(e, n, r) = \sum_{r=0}^n \binom{n}{r} r^n (1-r)^{n-r}$$

$$n = 21$$

	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	.99999999	.99999999
19	.99999997	.99999997
20	.99999995	.99999995
21	.99999993	.99999993
22	.99999991	.99999991
23	.99999989	.99999989
24	.99999987	.99999987
25	.99999985	.99999985
26	.99999983	.99999983
27	.99999981	.99999981
28	.99999979	.99999979
29	.99999977	.99999977
30	.99999975	.99999975
31	.99999973	.99999973
32	.99999971	.99999971
33	.99999969	.99999969
34	.99999967	.99999967
35	.99999965	.99999965
36	.99999963	.99999963
37	.99999961	.99999961
38	.99999959	.99999959
39	.99999957	.99999957
40	.99999955	.99999955
41	.99999953	.99999953
42	.99999951	.99999951
43	.99999949	.99999949
44	.99999947	.99999947
45	.99999945	.99999945
46	.99999943	.99999943
47	.99999941	.99999941
48	.99999939	.99999939
49	.99999937	.99999937
50	.99999935	.99999935
51	.99999933	.99999933
52	.99999931	.99999931
53	.99999929	.99999929
54	.99999927	.99999927
55	.99999925	.99999925
56	.99999923	.99999923
57	.99999921	.99999921
58	.99999919	.99999919
59	.99999917	.99999917
60	.99999915	.99999915
61	.99999913	.99999913
62	.99999911	.99999911
63	.99999909	.99999909
64	.99999907	.99999907

$$P(n, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 42

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.5613825	.8092176	.9177223	.9640244	.9850949	.9937413	.9973968	.9989870
2	.1920832	.4099492	.7090593	.8446412	.9207675	.9609830	.9813257	.9912760
3	.0494607	.2860641	.4476926	.5418321	.7836486	.8762993	.9323364	.9643318
4	.0094277	.0824331	.2321325	.4164686	.5912010	.7321569	.8340067	.9018505
5	.0014413	.0245691	.1004631	.2310497	.3911566	.5307455	.6878338	.7945467
6	.0001829	.0061407	.0369359	.1105144	.2269100	.3695073	.5161986	.6489867
7	.0000197	.0013143	.0117216	.0460616	.1159714	.2212919	.3504075	.4865502
8	.0000018	.0002448	.0032549	.0169043	.0526779	.1185773	.2149223	.3319140
9	.0000002	.0000408	.0008000	.0055147	.0212982	.0571135	.1193179	.2001784
10		.0000059	.0001757	.0016128	.0077620	.0248544	.0601505	.1187901
11		.0000008	.0000340	.0002359	.0025612	.0098234	.0276402	.0620429
12		.0000001	.0000062	.0001023	.0007695	.0035436	.0116235	.0297550
13			.0000010	.0000284	.0002116	.0011719	.0044905	.0131396
14			.0000002	.0000045	.0000335	.0003568	.0015996	.0053598
15				.0000008	.0000125	.0001004	.0005272	.0020286
16				.0000001	.0000027	.0000262	.0001612	.0007118
17					.0000005	.0000064	.0000459	.0002326
18					.0000001	.0000014	.0000122	.0000710
19						.0000003	.0000030	.0000203
20						.0000001	.0000007	.0000054
21							.0000002	.0000014
22								.0000003
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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 02

	.33	.34	.35	.36	.37	.38	.39	.40
31	.2082876	.2682083	.3355549	.4069281	.4814513	.5560829	.6282949	.6958842
32	.1487068	.1983936	.2543012	.3214300	.3918187	.4635973	.5359495	.6078999
33	.1019369	.1410741	.1887912	.2447894	.3081151	.3771899	.4499898	.5253936
34	.0670340	.0963344	.1336805	.1794708	.2335484	.2951004	.3627268	.4344748
35	.0422588	.0631186	.0909136	.1265194	.1704236	.2225906	.2823775	.3483228
36	.0255236	.0396518	.0593319	.0856712	.1195852	.1616423	.2119261	.2699387
37	.0147423	.0238490	.0371302	.0556734	.0806045	.1128428	.1531203	.2015414
38	.0081787	.0137608	.0222476	.0346951	.0521485	.0757189	.1063779	.1440817
39	.0043292	.0075943	.0127904	.0207211	.0323474	.0487387	.0709884	.1000968
40	.0021934	.0040103	.0070330	.0116830	.0192313	.0300878	.0454615	.0664349
41	.0010626	.0020256	.0037004	.0064906	.0109504	.0177994	.0279170	.0423105
42	.0004920	.0009782	.0018221	.0034006	.0059684	.0100840	.0164265	.0256354
43	.0002777	.0005415	.0009859	.0017039	.0031122	.0054678	.0092350	.0151134
44	.0000920	.0001911	.0004119	.0008161	.0015517	.0028360	.0049998	.0084648
45	.0000371	.0000838	.0001809	.0003735	.0007394	.0014062	.0025728	.0045331
46	.0000143	.0000337	.0000758	.0001632	.0003366	.0006662	.0012678	.0023231
47	.0000053	.0000122	.0000303	.0000681	.0001462	.0003014	.0005968	.0011370
48	.0000018	.0000047	.0000116	.0000271	.0000606	.0001301	.0002681	.0005114
49	.0000006	.0000016	.0000042	.0000103	.0000240	.0000536	.0001149	.0002362
50	.0000002	.0000005	.0000015	.0000037	.0000090	.0000210	.0000470	.0001007
51	.0000001	.0000002	.0000005	.0000013	.0000032	.0000079	.0000183	.0000408
52			.0000002	.0000004	.0000011	.0000028	.0000068	.0000157
53					.0000004	.0000011	.0000024	.0000058
54					.0000001	.0000003	.0000008	.0000020
55						.0000001	.0000003	.0000007
56							.0000001	.0000002
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$$F(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 62

r	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	.99999999	1.00000000
19	.99999996	.99999998
20	.99999986	.99999994
21	.99999957	.99999981
22	.99999874	.99999944
23	.99999653	.99999838
24	.99999099	.99999564
25	.99997790	.99998690
26	.99994872	.99997326
27	.99980726	.99988998
28	.99764880	.99867888
29	.99533667	.99728200
30	.99120188	.99468133
31	.98418832	.99008865
32	.97387718	.98237933
33	.95555512	.97009558
34	.93003369	.95148455
35	.89542338	.92466624
36	.84942207	.88787777
37	.79171633	.83985333
38	.72278991	.78014733
39	.64436557	.70944288
40	.55935788	.62967336
41	.47155579	.54392177
42	.38514377	.45607833
43	.30409950	.37032664
44	.23163766	.29055722
45	.16996996	.21985377
46	.11992203	.16014677
47	.08122419	.11312233
48	.05277778	.07533766
49	.03283666	.04851555
50	.01954225	.02990422
51	.01111224	.01762207
52	.00603104	.00991355
53	.00311196	.00531877
54	.00153665	.00271880
55	.00071997	.00132122
56	.00032202	.00061102
57	.00013551	.00026744
58	.00005540	.00011110
59	.00002204	.00004336
60	.00000773	.00001622
61	.00000025	.00000556
62	.00000008	.00000199
63	.00000002	.00000066
64	.00000001	.00000002

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$$F(x, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 83

	.01	.02	.03	.04	.05	.06	.07	.08
1	.5657687	.8130333	.9201906	.9662315	.9856401	.9941168	.9975785	.9990188
2	.8017161	.963346	.9715319	.9849486	.9939039	.9969485	.9984506	.9991881
3	.959469	.9313418	.9585336	.9750445	.9841384	.9937457	.9954868	.9971699
4	.9998280	.9853853	.9738593	.955024	.9308234	.900055	.8640898	.8234699
5	.0015212	.0857268	.1044131	.2384673	.4011590	.5613482	.6980659	.8031310
6	.0001955	.0065093	.0388418	.1153359	.2351224	.3803636	.5282130	.6606315
7	.0000214	.0014108	.0124780	.0486397	.1215183	.2301849	.3680129	.4995451
8	.0000020	.0002662	.0035089	.0180706	.0557476	.1247402	.2244063	.3454625
9	.0000002	.0000443	.0008736	.0059703	.0286628	.0606004	.1264108	.2181769
10		.0000066	.0001944	.0017688	.0084388	.0267898	.0642928	.1259409
11		.0000009	.0000390	.0004734	.0028212	.0107253	.0299160	.0665891
12		.0000001	.0000071	.0001152	.0008591	.0035204	.0127446	.0323866
13			.0000012	.0000256	.0002395	.0013142	.0049898	.0144688
14			.0000002	.0000032	.0000614	.0004057	.0018080	.0059821
15				.0000010	.0000145	.0001158	.0006028	.0029223
16				.0000002	.0000032	.0000306	.0001868	.0008164
17					.0000007	.0000075	.0000340	.0002709
18					.0000001	.0000017	.0000145	.0000840
19						.0000003	.0000037	.0000244
20						.0000001	.0000009	.0000066
21							.0000002	.0000017
22								.0000004
23								.0000001
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$$P(n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 63

	.33	.34	.35	.36	.37	.38	.39	.40
29	.3930996	.4699387	.5457914	.6200362	.6956602	.7684646	.8074763	.8540735
30	.3077900	.3791815	.4542059	.5301480	.6047423	.6749964	.7391150	.7957081
31	.2320654	.2956777	.3615565	.4305379	.5016776	.5750315	.6406421	.7086697
32	.1683688	.2221306	.2838910	.3532064	.4305379	.5016776	.5750315	.6406421
33	.1173710	.1605628	.2124337	.2723800	.3405379	.4170315	.4916421	.5636697
34	.0765580	.1115459	.1529693	.2029855	.2611343	.3282244	.3947358	.4702501
35	.0504346	.0744120	.1050880	.1435619	.1905776	.2460315	.3106421	.3842697
36	.0310462	.0476305	.0703855	.1003766	.1383954	.1848067	.2406021	.3067723
37	.0183135	.0273352	.0449008	.0664726	.0931274	.1248052	.1615045	.2032203
38	.0103471	.0171976	.0274695	.0422473	.0612714	.0845834	.1122074	.1441576
39	.0055976	.0096909	.0161074	.0257518	.0397716	.0582901	.0814903	.1094903
40	.0028882	.0052882	.0090481	.0150455	.0243842	.0371753	.0535470	.0736996
41	.0014358	.0027094	.0048668	.0084310	.0140143	.0228690	.0354759	.0521950
42	.0006803	.0013343	.0025055	.0045130	.0077018	.0123059	.0199078	.0310254
43	.0003082	.0006036	.0011341	.0021477	.0041690	.0073280	.0120514	.0199078
44	.0001333	.0002849	.0005813	.0011357	.0021241	.0041361	.0073530	.0120514
45	.0000552	.0001130	.0002367	.0004538	.0008400	.0016495	.0031554	.0061067
46	.0000218	.0000457	.0000926	.0001853	.0003686	.0007374	.0014747	.0029494
47	.0000082	.0000166	.0000332	.0000664	.0001328	.0002656	.0005312	.0010625
48	.0000030	.0000061	.0000122	.0000244	.0000488	.0000976	.0001952	.0003904
49	.0000010	.0000020	.0000040	.0000080	.0000160	.0000320	.0000640	.0001280
50	.0000003	.0000006	.0000012	.0000024	.0000048	.0000096	.0000192	.0000384
51	.0000001	.0000002	.0000004	.0000008	.0000016	.0000032	.0000064	.0000128
52		.0000001	.0000002	.0000004	.0000008	.0000016	.0000032	.0000064
53			.0000001	.0000002	.0000004	.0000008	.0000016	.0000032
54				.0000001	.0000002	.0000004	.0000008	.0000016
55					.0000001	.0000002	.0000004	.0000008
56						.0000001	.0000002	.0000004
57							.0000001	.0000002
58								.0000001
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$$E(e, n, r) = \sum_{j=0}^n \binom{n}{j} e^j (1-e)^{n-j}$$

	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	1.00000000	1.00000000
19	1.00000000	1.00000000
20	1.00000000	1.00000000
21	1.00000000	1.00000000
22	1.00000000	1.00000000
23	1.00000000	1.00000000
24	1.00000000	1.00000000
25	1.00000000	1.00000000
26	1.00000000	1.00000000
27	1.00000000	1.00000000
28	1.00000000	1.00000000
29	1.00000000	1.00000000
30	1.00000000	1.00000000
31	1.00000000	1.00000000
32	1.00000000	1.00000000
33	1.00000000	1.00000000
34	1.00000000	1.00000000
35	1.00000000	1.00000000
36	1.00000000	1.00000000
37	1.00000000	1.00000000
38	1.00000000	1.00000000
39	1.00000000	1.00000000
40	1.00000000	1.00000000
41	1.00000000	1.00000000
42	1.00000000	1.00000000
43	1.00000000	1.00000000
44	1.00000000	1.00000000
45	1.00000000	1.00000000
46	1.00000000	1.00000000
47	1.00000000	1.00000000
48	1.00000000	1.00000000
49	1.00000000	1.00000000
50	1.00000000	1.00000000
51	1.00000000	1.00000000
52	1.00000000	1.00000000
53	1.00000000	1.00000000
54	1.00000000	1.00000000
55	1.00000000	1.00000000
56	1.00000000	1.00000000
57	1.00000000	1.00000000
58	1.00000000	1.00000000
59	1.00000000	1.00000000
60	1.00000000	1.00000000
61	1.00000000	1.00000000
62	1.00000000	1.00000000
63	1.00000000	1.00000000
64	1.00000000	1.00000000
65	1.00000000	1.00000000

$$P(r, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

r	.17	.18	.19	.20	.21	.22	.23	.24
33	.0000011	.0000039	.0000127	.0000380	.0001038	.0002613	.0006104	.0013314
34	.0000003	.0000012	.0000044	.0000139	.0000402	.0001072	.0002644	.0006078
35	.0000001	.0000004	.0000014	.0000048	.0000149	.0000420	.0001093	.0002650
36		.0000001	.0000004	.0000016	.0000053	.0000157	.0000432	.0001104
37			.0000001	.0000005	.0000018	.0000056	.0000163	.0000339
38				.0000002	.0000006	.0000019	.0000059	.0000167
39					.0000002	.0000006	.0000020	.0000061
40					.0000001	.0000002	.0000007	.0000021
41						.0000001	.0000002	.0000007
42							.0000001	.0000002
43								.0000001
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$$P(n, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 84

x/p	.33	.34	.35	.36	.37	.38	.39	.40
26	.6932089	.7574760	.8131795	.8598256	.8975922	.9271745	.9496039	.9660721
27	.4066535	.6788451	.7442608	.8014949	.8498843	.8894447	.9207368	.9446962
28	.5150741	.5918304	.6645429	.7310121	.7896955	.8397694	.8810905	.9140837
29	.4232506	.5005779	.5771597	.6503029	.7177351	.7797896	.8349900	.8725382
30	.3355167	.4098022	.4862998	.5686360	.6361245	.7044343	.7657842	.8190543
31	.2570555	.3240697	.3966048	.4722295	.5482536	.6220081	.6911126	.7536851
32	.1893951	.2471366	.3124739	.3836458	.4583575	.5340069	.6079512	.6777725
33	.1342001	.1814958	.2374438	.3011175	.3709140	.4446749	.5188904	.5893923
34	.0913622	.1282116	.1737818	.2279675	.2899899	.3583993	.4311734	.5058908
35	.0697133	.0870375	.1223626	.1662472	.2186996	.2790814	.3460523	.4178453
36	.0374444	.0567362	.0828093	.1166505	.1588868	.2096325	.2683036	.3339848
37	.0225153	.0354896	.0538204	.0786780	.1110735	.1516963	.2007601	.2578891
38	.0129761	.0212904	.0335705	.0509684	.0746444	.1036301	.1446710	.1920767
39	.0071620	.0112432	.0200841	.0316904	.0461823	.0647090	.1003190	.1378103
40	.0037890	.0067460	.0115184	.0188994	.0295516	.0454641	.0666726	.0951393
41	.0019184	.0035601	.0063302	.0108059	.0177402	.0280573	.0428158	.0631360
42	.0009296	.0017988	.0033320	.0059199	.0101067	.0166080	.0263099	.0402394
43	.0004310	.0008699	.0016791	.0031061	.0055168	.0094237	.0155057	.0246115
44	.0001911	.0004024	.0008097	.0015602	.0028839	.0051227	.0087587	.0144352
45	.0000810	.0001781	.0003736	.0007499	.0014429	.0026664	.0047391	.0081136
46	.0000328	.0000753	.0001648	.0003447	.0006907	.0013282	.0024548	.0043674
47	.0000127	.0000304	.0000695	.0001515	.0003162	.0006328	.0012166	.0022500
48	.0000047	.0000118	.0000280	.0000636	.0001383	.0002882	.0005765	.0011088
49	.0000017	.0000043	.0000108	.0000355	.000078	.0001254	.0002611	.0005223
50	.0000006	.0000015	.0000040	.0000108	.0000231	.0000532	.0001129	.0002350
51	.0000002	.0000005	.0000014	.0000035	.0000088	.0000207	.0000466	.0001009
52	.0000001	.0000002	.0000005	.0000012	.0000032	.0000078	.0000184	.0000414
53			.0000001	.0000004	.0000011	.0000028	.0000069	.0000162
54				.0000001	.0000004	.0000010	.0000025	.0000060
55					.0000001	.0000003	.0000008	.0000021
56						.0000001	.0000003	.0000007
57							.0000001	.0000002
58								.0000001
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AMCP 706-109

$$P(x, n, p) = \sum_{i=0}^n \binom{n}{i} p^i (1-p)^{n-i}$$

n = 24

x	.41	.42	.43	.44	.45	.46	.47	.48
61				.00000001	.00000003	.00000007	.00000017	.00000040
62					.00000001	.00000002	.00000005	.00000013
63						.00000001	.00000002	.00000004
64								.00000001

x	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	1.00000000	1.00000000
19	.99999999	.99999999
20	.99999999	.99999999
21	.99999991	.99999992
22	.99999982	.99999975
23	.99999963	.99999957
24	.99999934	.99999927
25	.99999891	.99999864
26	.99999734	.99999668
27	.99999574	.99999500
28	.99999307	.99999228
29	.99998934	.99998853
30	.99998462	.99998381
31	.99997890	.99997828
32	.99997223	.99997164
33	.99996452	.99996392
34	.99995581	.99995521
35	.99994610	.99994550
36	.99993539	.99993479
37	.99992368	.99992308
38	.99991097	.99991037
39	.99989726	.99989666
40	.99988255	.99988195
41	.99986684	.99986624
42	.99985013	.99984953
43	.99983242	.99983182
44	.99981371	.99981311
45	.99979400	.99979340
46	.99977329	.99977269
47	.99975158	.99975098
48	.99972887	.99972827
49	.99970516	.99970456
50	.99968045	.99967985
51	.99965474	.99965414
52	.99962803	.99962743
53	.99960032	.99960000
54	.99957161	.99957129
55	.99954190	.99954158
56	.99951119	.99951087
57	.99947948	.99947916
58	.99944677	.99944645
59	.99941306	.99941274
60	.99937835	.99937803
61	.99934264	.99934232
62	.99930593	.99930561
63	.99926822	.99926790
64	.99922951	.99922919
65	.99918980	.99918948
66	.99914909	.99914877

AMCP 706-109

$$P(n, n, F) = \sum_{r=0}^n \binom{n}{r} F^r (1-F)^{n-r}$$

n = 05

X	.33	.34	.35	.36	.37	.38	.39	.40
24	.8534333	.8432712	.8243498	.8078973	.7950813	.7872431	.7855803	.7941179
25	.7922701	.7843237	.7840586	.7917709	.7942763	.7961310	.7974582	.7983745
26	.7187648	.7003456	.6829206	.6762768	.6710837	.6674031	.6653638	.6717241
27	.6352160	.6054796	.5838824	.5724940	.5675362	.5640780	.5619950	.5632466
28	.5452953	.5024154	.4692441	.4453859	.4219654	.4006460	.3815526	.3653287
29	.4535524	.3916038	.3377438	.2935822	.2593605	.2359419	.2134142	.1918564
30	.3647369	.2866660	.2181008	.1619611	.1186320	.7323093	.7906295	.8404478
31	.2810797	.2132107	.1579980	.1147758	.8076660	.5533301	.3202345	.1798328
32	.2117231	.1572939	.1149197	.8155359	.4916191	.2674473	.1403842	.07081375
33	.1524145	.1038137	.7237043	.4308277	.2403268	.1231352	.6542341	.3274804
34	.1054987	.7163203	.4160635	.2254015	.1199318	.5911840	.2857730	.1411802
35	.0701575	.4103877	.2140359	.1184665	.6245070	.3092222	.1792900	.0930667
36	.0447931	.0270387	.0166529	.0134553	.01810175	.02360231	.02986900	.03675290
37	.0274419	.0162134	.0096665	.0062148	.0047644	.0037120	.00271333	.00183274
38	.0161241	.0096119	.0060658	.0040439	.00281232	.0018352	.00126546	.00081074
39	.0090827	.0053192	.0034804	.0023603	.00157932	.0009790	.0006166	.00039569
40	.0049031	.0026150	.0014517	.0008503	.0005339	.0003598	.0002571	.00017207
41	.0025357	.0014433	.00081463	.0005197	.0003214	.0002199	.0001590	.00010373
42	.0012550	.0007376	.00043814	.0002788	.00017311	.0001127	.00007472	.000049980
43	.0005955	.00031857	.00018576	.0001191	.00007151	.00004537	.00002913	.000018627
44	.0002703	.0001514	.000081140	.00005167	.0000318	.0000201	.000013900	.000009057
45	.0001174	.0000553	.0000282	.0000146	.0000096	.0000061	.0000040	.0000026
46	.0000488	.00002103	.0000103	.0000053	.0000029	.0000016	.0000009	.0000005
47	.0000194	.0000095	.0000048	.0000025	.0000013	.0000007	.0000004	.0000002
48	.0000073	.0000037	.0000019	.0000010	.0000005	.0000003	.0000001	.0000001
49	.0000027	.0000014	.0000007	.0000004	.0000002	.0000001	.0000001	.0000001
50	.0000009	.0000005	.0000002	.0000001	.0000001	.0000001	.0000001	.0000001
51	.0000003	.0000002	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001
52	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001
53		.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001
54			.0000001	.0000001	.0000001	.0000001	.0000001	.0000001
55				.0000001	.0000001	.0000001	.0000001	.0000001
56					.0000001	.0000001	.0000001	.0000001
57						.0000001	.0000001	.0000001
58							.0000001	.0000001
59								.0000001
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AMCP 706-109

$$P(c, n, r) = \sum_{r=0}^n \binom{n}{r} r^c (1-r)^{n-r}$$

n = 65

X								
59	.00000001	.00000003	.00000008	.00000020	.00000047	.00000110	.00000245	.00000530
60		.00000001	.00000003	.00000007	.00000016	.00000039	.00000091	.00000205
61			.00000001	.00000002	.00000005	.00000013	.00000032	.00000075
62				.00000001	.00000002	.00000004	.00000011	.00000026
63						.00000001	.00000003	.00000009
64							.00000001	.00000003
65								.00000001

X	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	1.00000000	1.00000000
19	.99999999	1.00000000
20	.99999999	.99999999
21	.99999999	.99999999
22	.99999999	.99999999
23	.99999999	.99999999
24	.99999999	.99999999
25	.99999999	.99999999
26	.99999999	.99999999
27	.99999999	.99999999
28	.99999999	.99999999
29	.99999999	.99999999
30	.99999999	.99999999
31	.99999999	.99999999
32	.99999999	.99999999
33	.99999999	.99999999
34	.99999999	.99999999
35	.99999999	.99999999
36	.99999999	.99999999
37	.99999999	.99999999
38	.99999999	.99999999
39	.99999999	.99999999
40	.99999999	.99999999
41	.99999999	.99999999
42	.99999999	.99999999
43	.99999999	.99999999
44	.99999999	.99999999
45	.99999999	.99999999
46	.99999999	.99999999
47	.99999999	.99999999
48	.99999999	.99999999
49	.99999999	.99999999
50	.99999999	.99999999
51	.99999999	.99999999
52	.99999999	.99999999
53	.99999999	.99999999
54	.99999999	.99999999
55	.99999999	.99999999
56	.99999999	.99999999
57	.99999999	.99999999
58	.99999999	.99999999
59	.99999999	.99999999
60	.99999999	.99999999
61	.99999999	.99999999
62	.99999999	.99999999
63	.99999999	.99999999
64	.99999999	.99999999
65	.99999999	.99999999
66	.99999999	.99999999

$$N(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

$$n = 06$$

	.41	.42	.43	.44	.45	.46	.47	.48
61								
62		.00000001	.00000002	.00000004	.00000010	.00000025	.00000060	.00000139
63				.00000001	.00000003	.00000008	.00000021	.00000050
64					.00000001	.00000003	.00000007	.00000017
65						.00000001	.00000001	.00000002
%	.49	.50						
1	1.00000000	1.00000000						
2	1.00000000	1.00000000						
3	1.00000000	1.00000000						
4	1.00000000	1.00000000						
5	1.00000000	1.00000000						
6	1.00000000	1.00000000						
7	1.00000000	1.00000000						
8	1.00000000	1.00000000						
9	1.00000000	1.00000000						
10	1.00000000	1.00000000						
11	1.00000000	1.00000000						
12	1.00000000	1.00000000						
13	1.00000000	1.00000000						
14	1.00000000	1.00000000						
15	1.00000000	1.00000000						
16	1.00000000	1.00000000						
17	1.00000000	1.00000000						
18	1.00000000	1.00000000						
19	.99999999	.99999999						
20	.99999997	.99999999						
21	.99999992	.99999997						
22	.99999974	.99999989						
23	.99999924	.99999967						
24	.99999790	.99999906						
25	.99999453	.99999746						
26	.99998650	.99999348						
27	.99998039	.99998415						
28	.99997474	.99997841						
29	.99996948	.99997299						
30	.99996469	.99996814						
31	.99996036	.99996370						
32	.99995649	.99995977						
33	.99995307	.99995627						
34	.99995009	.99995318						
35	.99994754	.99995057						
36	.99994541	.99994833						
37	.99994369	.99994651						
38	.99994236	.99994508						
39	.99994140	.99994402						
40	.99994079	.99994332						
41	.99994050	.99994293						
42	.99994050	.99994293						
43	.99994079	.99994332						
44	.99994140	.99994402						
45	.99994236	.99994508						
46	.99994369	.99994651						
47	.99994541	.99994833						
48	.99994754	.99995057						
49	.99995009	.99995318						
50	.99995307	.99995627						
51	.99995649	.99995977						
52	.99996036	.99996370						
53	.99996469	.99996814						
54	.99996948	.99997299						
55	.99997474	.99997841						
56	.99998039	.99998415						
57	.99998650	.99999036						
58	.99999348	.99999746						
59	.99999997	.99999999						
60	.99999999	.99999999						
61	.00000000	.00000000						
62	.00000000	.00000000						
63	.00000000	.00000000						
64	.00000000	.00000000						
65	.00000000	.00000000						
66	.00000001	.00000003						
67	.00000001	.00000001						

AMCP 706-109

$$F(c, n, r) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 57

r	.01	.02	.03	.04	.05	.06	.07	.08
1	.5888721	.5875479	.5862345	.5849318	.5836397	.5823581	.5810868	.5798258
2	.3163183	.3153573	.3144033	.3134562	.3125160	.3115826	.3106558	.3097356
3	.0571051	.0562595	.0554258	.0546038	.0537934	.0529945	.0522070	.0514309
4	.0115390	.0112900	.0110478	.0108123	.0105834	.0103610	.0101451	.0099357
5	.0018733	.0018031	.0017328	.0016625	.0015922	.0015219	.0014516	.0013813
6	.0002358	.0002145	.0001932	.0001719	.0001506	.0001293	.0001080	.0000867
7	.0000290	.0000234	.0000178	.0000122	.0000066	.0000010	.0000004	.0000000
8	.0000003	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
9	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
10	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
11		.0000001	.0000003	.0000006	.0000010	.0000014	.0000018	.0000022
12		.0000002	.0000005	.0000009	.0000013	.0000017	.0000021	.0000025
13			.0000003	.0000007	.0000011	.0000015	.0000019	.0000023
14				.0000004	.0000008	.0000012	.0000016	.0000020
15					.0000005	.0000009	.0000013	.0000017
16						.0000006	.0000010	.0000014
17							.0000007	.0000011
18								.0000008
19								
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22								
23								
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AMCP 706-109

$$f(x, y, z) = \sum_{i=1}^n \sum_{j=1}^m \sum_{k=1}^p p_{ijk} x_i y_j z_k$$

n = 17

λ^p	.41	.42	.43	.44	.45	.46	.47	.48
54	.0000012	.0000030	.0000073	.0000169	.0000378	.00000815	.00001695	.00003403
59	.0000004	.0000010	.0000026	.0000063	.0000147	.00000330	.00000713	.00001480
60	.00000001	.00000003	.00000009	.00000023	.0000055	.00000127	.00000386	.00000619
61		.00000001	.00000003	.00000008	.00000019	.00000047	.00000109	.00000245
62			.00000001	.00000002	.00000006	.00000016	.00000039	.00000092
63				.00000001	.00000002	.00000005	.00000013	.00000033
64					.00000001	.00000002	.00000004	.00000011
65							.00000001	.00000004
66								.00000001

λ^p	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	1.00000000	1.00000000
19	1.00000000	1.00000000
20	.99999998	.99999999
21	.99999994	.99999998
22	.99999983	.99999993
23	.99999949	.99999978
24	.99999856	.99999937
25	.99999618	.99999826
26	.99999044	.99999547
27	.99997727	.99998882
28	.99994068	.99997378
29	.99988982	.99994157
30	.99977478	.99987603
31	.99956108	.99974932
32	.99918356	.99951634
33	.99854081	.99910862
34	.99753238	.99842909
35	.99590136	.99734584
36	.99372478	.99571555
37	.99093009	.99335421
38	.98644572	.99010174
39	.98120266	.98581964
40	.97487356	.98044745
41	.96757647	.97398542
42	.9593956	.9658575
43	.95108241	.95848135
44	.94257899	.95000000
45	.9340909	.94151865
46	.92608834	.9341425
47	.92032844	.92601456
48	.91481363	.9185955
49	.9093818	.9118036
50	.90402165	.9049096
51	.89855613	.8984509
52	.8931756	.8928445
53	.8879444	.8875016
54	.8828915	.8827041
55	.8780340	.87849138
56	.8732747	.8738366
57	.86861361	.86925068
58	.8640605	.86472197
59	.8596299	.8602843
60	.8553296	.8559622
61	.8510534	.8516113
62	.8468020	.8473451
63	.8425757	.84306174
64	.8383727	.8387663
65	.8341909	.8344622
66	.8300303	.8302807
67	.8258901	.8261322
68	.8217701	.8218801

AMCF 706-109

$$F(x, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 88

x	.41	.42	.43	.44	.45	.46	.47	.48
36	.0000154	.0000351	.0000772	.0001633	.0003327	.0006533	.0012384	.0022673
37	.0000058	.0000139	.0000317	.0000697	.0001474	.0003007	.0005919	.0011249
38	.0000021	.0000052	.0000124	.0000283	.0000623	.0001321	.0002700	.0005329
39	.0000007	.0000019	.0000046	.0000110	.0000251	.0000553	.0001175	.0002407
40	.0000002	.0000006	.0000016	.0000041	.0000096	.0000221	.0000487	.0001036
41	.0000001	.0000002	.0000006	.0000014	.0000035	.0000084	.0000192	.0000424
42		.0000001	.0000002	.0000005	.0000012	.0000030	.0000072	.0000165
43			.0000001	.0000002	.0000004	.0000010	.0000026	.0000061
44				.0000001	.0000001	.0000003	.0000007	.0000021
45					.0000001	.0000001	.0000003	.0000007
46						.0000001	.0000001	.0000003
47							.0000001	.0000003
48								.0000003

x	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	1.00000000	1.00000000
19	1.00000000	1.00000000
20	.99999999	1.00000000
21	.99999996	.99999999
22	.99999988	.99999985
23	.99999975	.99999966
24	.99999951	.99999947
25	.99999915	.99999911
26	.99999875	.99999866
27	.99999832	.99999821
28	.99999789	.99999770
29	.99999746	.99999726
30	.99999702	.99999680
31	.99999657	.99999637
32	.99999615	.99999593
33	.99999574	.99999550
34	.99999534	.99999508
35	.99999494	.99999467
36	.99999451	.99999427
37	.99999412	.99999383
38	.99999374	.99999342
39	.99999337	.99999303
40	.99999302	.99999265
41	.99999267	.99999229
42	.99999234	.99999193
43	.99999201	.99999158
44	.99999169	.99999122
45	.99999137	.99999088
46	.99999106	.99999055
47	.99999075	.99999022
48	.99999044	.99998989
49	.99999013	.99998956
50	.99998982	.99998923
51	.99998951	.99998890
52	.99998920	.99998857
53	.99998889	.99998824
54	.99998858	.99998789
55	.99998827	.99998760
56	.99998796	.99998729
57	.99998765	.99998696
58	.99998734	.99998663
59	.99998703	.99998630
60	.99998672	.99998597
61	.99998641	.99998564
62	.99998610	.99998531
63	.99998579	.99998498
64	.99998548	.99998465
65	.99998517	.99998432
66	.99998486	.99998399
67	.99998455	.99998366
68	.99998424	.99998333

$$N(c, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 89

	.41	.42	.43	.44	.45	.46	.47	.48
55	.0000609	.0001311	.0002742	.0005489	.0010588	.0019694	.0035362	.0061348
56	.0000249	.0000561	.0001213	.0002524	.0005056	.0009765	.0018198	.0032757
57	.0000097	.0000228	.0000513	.0001109	.0002308	.0004629	.0008957	.0016734
58	.0000036	.0000089	.0000207	.0000465	.0001006	.0002097	.0004213	.0008171
59	.0000013	.0000032	.0000078	.0000176	.0000419	.0000895	.0001892	.0003810
60	.0000004	.0000012	.0000029	.0000071	.0000166	.0000374	.0000810	.0001694
61	.0000001	.0000004	.0000010	.0000026	.0000067	.0000147	.0000331	.0000718
62		.0000001	.0000003	.0000009	.0000023	.0000055	.0000120	.0000270
63			.0000001	.0000003	.0000008	.0000019	.0000047	.0000111
64				.0000001	.0000002	.0000007	.0000017	.0000040
65					.0000001	.0000002	.0000006	.0000014
66						.0000001	.0000002	.0000005
67							.0000001	.0000001

	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	1.0000000	1.0000000
8	1.0000000	1.0000000
9	1.0000000	1.0000000
10	1.0000000	1.0000000
11	1.0000000	1.0000000
12	1.0000000	1.0000000
13	1.0000000	1.0000000
14	1.0000000	1.0000000
15	1.0000000	1.0000000
16	1.0000000	1.0000000
17	1.0000000	1.0000000
18	1.0000000	1.0000000
19	1.0000000	1.0000000
20	.9999999	1.0000000
21	.9999998	.9999999
22	.9999996	.9999997
23	.9999993	.9999994
24	.9999989	.9999989
25	.9999984	.9999984
26	.9999978	.9999978
27	.9999971	.9999971
28	.9999963	.9999963
29	.9999954	.9999954
30	.9999944	.9999944
31	.9999933	.9999933
32	.9999921	.9999921
33	.9999908	.9999908
34	.9999894	.9999894
35	.9999879	.9999879
36	.9999863	.9999863
37	.9999846	.9999846
38	.9999828	.9999828
39	.9999809	.9999809
40	.9999789	.9999789
41	.9999768	.9999768
42	.9999746	.9999746
43	.9999723	.9999723
44	.9999699	.9999699
45	.9999674	.9999674
46	.9999648	.9999648
47	.9999621	.9999621
48	.9999593	.9999593
49	.9999564	.9999564
50	.9999534	.9999534
51	.9999503	.9999503
52	.9999471	.9999471
53	.9999438	.9999438
54	.9999404	.9999404
55	.9999369	.9999369
56	.9999333	.9999333
57	.9999296	.9999296
58	.9999258	.9999258
59	.9999219	.9999219
60	.9999179	.9999179
61	.9999138	.9999138
62	.9999096	.9999096
63	.9999053	.9999053
64	.9999009	.9999009
65	.9998964	.9998964
66	.9998918	.9998918
67	.9998871	.9998871
68	.9998823	.9998823
69	.9998774	.9998774

$$P(r, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 90

r	.41	.42	.43	.44	.45	.46	.47	.48
34	.00002143	.00004390	.00006649	.00164403	.0029978	.0052047	.0089956	.0147986
35	.0000348	.0000696	.0001111	.0008099	.0015369	.0028180	.0049657	.0084711
36	.0000397	.0000794	.0001570	.0003829	.0007545	.0014333	.0026245	.0046481
37	.0000160	.0000316	.0000614	.0001731	.0003545	.0006993	.0013301	.0024495
38	.0000061	.0000124	.0000239	.0000748	.0001598	.0003263	.0006443	.0012381
39	.0000023	.0000046	.0000091	.0000309	.0000683	.0001454	.0002993	.0005903
40	.0000008	.0000016	.0000031	.0000128	.0000289	.0000619	.0001318	.0002710
41	.0000003	.0000007	.0000018	.0000046	.0000109	.0000251	.0000536	.0001187
42	.0000001	.0000003	.0000006	.0000016	.0000041	.0000097	.0000233	.0000498
43		.0000001	.0000002	.0000004	.0000014	.0000036	.0000086	.0000197
44			.0000001	.0000002	.0000008	.0000019	.0000043	.0000097
45				.0000001	.0000002	.0000004	.0000011	.0000027
46					.0000001	.0000001	.0000004	.0000009
47						.0000001	.0000001	.0000003
48							.0000001	.0000001

r	.49	.50
1	.0000000	1.0000000
2	.0000000	1.0000000
3	.0000000	1.0000000
4	.0000000	1.0000000
5	.0000000	1.0000000
6	.0000000	1.0000000
7	.0000000	1.0000000
8	.0000000	1.0000000
9	.0000000	1.0000000
10	.0000000	1.0000000
11	.0000000	1.0000000
12	.0000000	1.0000000
13	.0000000	1.0000000
14	.0000000	1.0000000
15	.0000000	1.0000000
16	.0000000	1.0000000
17	.0000000	1.0000000
18	.0000000	1.0000000
19	.0000000	1.0000000
20	.0000000	1.0000000
21	.9999999	.9999999
22	.9999999	.9999999
23	.9999999	.9999999
24	.9999999	.9999999
25	.9999999	.9999999
26	.9999999	.9999999
27	.9999999	.9999999
28	.9999999	.9999999
29	.9999999	.9999999
30	.9999999	.9999999
31	.9999999	.9999999
32	.9999999	.9999999
33	.9999999	.9999999
34	.9999999	.9999999
35	.9999999	.9999999
36	.9999999	.9999999
37	.9999999	.9999999
38	.9999999	.9999999
39	.9999999	.9999999
40	.9999999	.9999999
41	.7759206	.8885634
42	.7079408	.7496038
43	.6317412	.7007941
44	.5500169	.6230834
45	.4661439	.5419356
46	.3837693	.4580644
47	.3063455	.3760166
48	.2367061	.2992059
49	.1767673	.2303962
50	.1274059	.1714166
51	.0885169	.1230532
52	.0598119	.0851818
53	.0380950	.0556722
54	.0235483	.0363748
55	.0139730	.0228988
56	.0079497	.0131508
57	.0043334	.0074334
58	.0022809	.0040830
59	.0011279	.0020826
60	.0005375	.0010301
61	.0002445	.0004864
62	.0001060	.0002190
63	.0000438	.0000999
64	.0000173	.0000383
65	.0000064	.0000148
66	.0000023	.0000055
67	.0000008	.0000019
68	.0000003	.0000006
69	.0000001	.0000002
70		.0000001

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$$H(r, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 91

	.01	.02	.03	.04	.05	.06	.07	.08
1	.5003153	.4804356	.4574499	.4313397	.4020661	.3694134	.3334450	.2944934
2	.0310097	.05455304	.07614069	.0933737	.0946140	.075833	.0493499	.0284844
3	.0065274	.01403369	.02163987	.02710073	.0300519	.03037211	.0279274	.0229770
4	.0014208	.00309891	.0045972	.00590098	.006726705	.00704517	.00677300	.00633801
5	.0002810	.00062430	.00098396	.00134396	.00160160	.00175304	.001714912	.00159053
6	.00003285	.0000568	.0000863	.00011796	.00015081	.00018463	.00021948	.00025514
7	.00000389	.0000067	.0000103	.00001369	.00001704081	.0000203818	.0000237142	.000027033
8	.00000041	.00000084	.00000013	.00000018	.00000024	.00000030	.00000036	.00000041
9	.00000004	.00000008	.00000001	.00000001	.00000001	.00000001	.00000001	.00000001
10		.00000002	.00000003	.00000004	.00000005	.00000006	.00000007	.00000008
11		.00000003	.00000005	.00000007	.00000009	.00000011	.00000013	.00000015
12			.00000005	.00000008	.00000011	.00000014	.00000017	.00000020
13			.00000006	.00000010	.00000013	.00000016	.00000020	.00000023
14			.00000007	.00000011	.00000015	.00000019	.00000023	.00000027
15			.00000008	.00000012	.00000016	.00000020	.00000025	.00000029
16				.00000009	.00000013	.00000017	.00000021	.00000025
17				.00000010	.00000014	.00000018	.00000022	.00000026
18				.00000011	.00000015	.00000019	.00000023	.00000027
19				.00000012	.00000016	.00000020	.00000024	.00000028
20				.00000013	.00000017	.00000021	.00000025	.00000029
21					.00000018	.00000022	.00000026	.00000030
22					.00000019	.00000023	.00000027	.00000031
23					.00000020	.00000024	.00000028	.00000032
24					.00000021	.00000025	.00000029	.00000033
25						.00000026	.00000030	.00000034
26						.00000027	.00000031	.00000035
27						.00000028	.00000032	.00000036
28						.00000029	.00000033	.00000037
29						.00000030	.00000034	.00000038
30						.00000031	.00000035	.00000039
31						.00000032	.00000036	.00000040
32						.00000033	.00000037	.00000041
33						.00000034	.00000038	.00000042
34						.00000035	.00000039	.00000043
35						.00000036	.00000040	.00000044
36						.00000037	.00000041	.00000045
37						.00000038	.00000042	.00000046
38						.00000039	.00000043	.00000047
39						.00000040	.00000044	.00000048
40						.00000041	.00000045	.00000049
41						.00000042	.00000046	.00000050
42						.00000043	.00000047	.00000051
43						.00000044	.00000048	.00000052
44						.00000045	.00000049	.00000053
45						.00000046	.00000050	.00000054
46						.00000047	.00000051	.00000055
47						.00000048	.00000052	.00000056
48						.00000049	.00000053	.00000057
49						.00000050	.00000054	.00000058
50						.00000051	.00000055	.00000059
51						.00000052	.00000056	.00000060
52						.00000053	.00000057	.00000061
53						.00000054	.00000058	.00000062
54						.00000055	.00000059	.00000063
55						.00000056	.00000060	.00000064
56						.00000057	.00000061	.00000065
57						.00000058	.00000062	.00000066
58						.00000059	.00000063	.00000067
59						.00000060	.00000064	.00000068
60						.00000061	.00000065	.00000069
61						.00000062	.00000066	.00000070
62						.00000063	.00000067	.00000071
63						.00000064	.00000068	.00000072
64						.00000065	.00000069	.00000073
65						.00000066	.00000070	.00000074
66						.00000067	.00000071	.00000075
67						.00000068	.00000072	.00000076
68						.00000069	.00000073	.00000077
69						.00000070	.00000074	.00000078
70						.00000071	.00000075	.00000079
71						.00000072	.00000076	.00000080
72						.00000073	.00000077	.00000081
73						.00000074	.00000078	.00000082
74						.00000075	.00000079	.00000083
75						.00000076	.00000080	.00000084
76						.00000077	.00000081	.00000085
77						.00000078	.00000082	.00000086
78						.00000079	.00000083	.00000087
79						.00000080	.00000084	.00000088
80						.00000081	.00000085	.00000089
81						.00000082	.00000086	.00000090
82						.00000083	.00000087	.00000091
83						.00000084	.00000088	.00000092
84						.00000085	.00000089	.00000093
85						.00000086	.00000090	.00000094
86						.00000087	.00000091	.00000095
87						.00000088	.00000092	.00000096
88						.00000089	.00000093	.00000097
89						.00000090	.00000094	.00000098
90						.00000091	.00000095	.00000099
91						.00000092	.00000096	.00000100

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 91

X	.41	.42	.43	.44	.45	.46	.47	.48
52	.0013697	.0025589	.0045997	.0079654	.0133035	.0214519	.0334308	.0503993
53	.0006735	.0013078	.0024409	.0043876	.0076027	.0127120	.0205307	.0312085
54	.0003175	.0006406	.0012425	.0023190	.0041704	.0072335	.0121128	.0196006
55	.0001434	.0003008	.0006063	.0011753	.0021943	.0039494	.0068598	.0115083
56	.0000620	.0001353	.0002834	.0005708	.0011066	.0020674	.0037259	.0064032
57	.0000287	.0000582	.0001268	.0002654	.0005345	.0010368	.0019394	.0035012
58	.0000102	.0000240	.0000543	.0001181	.0002471	.0004977	.0009466	.0018110
59	.0000038	.0000094	.0000222	.0000503	.0001092	.0002286	.0004609	.0008964
60	.0000014	.0000035	.0000087	.0000204	.0000461	.0001003	.0002101	.0004242
61	.0000005	.0000013	.0000032	.0000079	.0000186	.0000420	.0000914	.0001918
62	.0000002	.0000004	.0000012	.0000029	.0000072	.0000168	.0000380	.0000827
63		.0000001	.0000004	.0000010	.0000026	.0000064	.0000150	.0000340
64			.0000001	.0000001	.0000003	.0000008	.0000020	.0000050
65				.0000001	.0000001	.0000003	.0000007	.0000018
66					.0000001	.0000001	.0000002	.0000006
67						.0000001	.0000001	.0000002
68							.0000001	.0000001
69								.0000001
70								
71								
72								
73								
74								
75								
76								
77								
78								
79								
80								
81								
82								
83								
84								
85								
86								
87								
88								
89								
90								
91								

X	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	1.0000000	1.0000000
8	1.0000000	1.0000000
9	1.0000000	1.0000000
10	1.0000000	1.0000000
11	1.0000000	1.0000000
12	1.0000000	1.0000000
13	1.0000000	1.0000000
14	1.0000000	1.0000000
15	1.0000000	1.0000000
16	1.0000000	1.0000000
17	1.0000000	1.0000000
18	1.0000000	1.0000000
19	1.0000000	1.0000000
20	1.0000000	1.0000000
21	.9999999	1.0000000
22	.9999997	.9999999
23	.9999990	.9999996
24	.9999989	.9999987
25	.9999983	.9999983
26	.9999976	.9999989
27	.9999961	.9999973
28	.9999940	.9999959
29	.9999917	.9999943
30	.9999898	.9999927
31	.9999874	.9999907
32	.9999846	.9999884
33	.9999815	.9999859
34	.9999781	.9999831
35	.9999743	.9999801
36	.9999701	.9999768
37	.9999655	.9999732
38	.9999606	.9999693
39	.9999554	.9999651
40	.9999500	.9999606
41	.9999443	.9999559
42	.9999383	.9999517
43	.9999320	.9999472
44	.9999254	.9999425
45	.9999185	.9999376
46	.9999113	.9999325
47	.9999038	.9999272
48	.9998960	.9999217
49	.9998879	.9999160
50	.9998795	.9999101
51	.9998708	.9999040
52	.9998618	.9998977
53	.9998525	.9998912
54	.9998429	.9998845
55	.9998330	.9998776
56	.9998228	.9998705
57	.9998123	.9998632
58	.9998015	.9998557
59	.9997904	.9998480
60	.9997790	.9998401
61	.9997673	.9998320
62	.9997553	.9998237
63	.9997430	.9998152
64	.9997304	.9998065
65	.9997175	.9997976
66	.9997043	.9997885
67	.9996908	.9997792
68	.9996770	.9997697
69	.9996629	.9997600
70	.9996485	.9997502
71	.9996338	.9997402
72	.9996188	.9997301
73	.9996035	.9997198
74	.9995879	.9997094
75	.9995720	.9996988
76	.9995558	.9996881
77	.9995393	.9996772
78	.9995225	.9996662
79	.9995054	.9996550
80	.9994880	.9996437
81	.9994703	.9996322
82	.9994523	.9996206
83	.9994340	.9996089
84	.9994154	.9995971
85	.9993965	.9995852
86	.9993773	.9995732
87	.9993578	.9995611
88	.9993380	.9995489
89	.9993179	.9995366
90	.9992975	.9995242
91	.9992768	.9995117

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 92

λ	.01	.02	.03	.04	.05	.06	.07	.08
1	.6033222	.8441169	.9393264	.9766141	.9910758	.9966290	.9987398	.9995339
2	.8346923	.5514395	.7466882	.8889683	.9478636	.9765331	.9900134	.9958051
3	.0652715	.4796657	.5237489	.7170148	.8433819	.9193410	.9601879	.9810520
4	.0113919	.1112719	.3983413	.5048729	.6889926	.8052496	.8984435	.9451856
5	.0023934	.0377188	.1432283	.3076215	.4896488	.6528965	.7796280	.8681028
6	.0003421	.0105806	.0587957	.1631905	.3124067	.4779467	.6299114	.7541424
7	.0000417	.0025499	.0209316	.0759301	.1771430	.3146811	.4665110	.6104538
8	.0000044	.0005363	.0065443	.0312611	.0896792	.1871964	.3134096	.4559466
9	.0000004	.0000997	.0018165	.0114858	.0407486	.1007374	.1945691	.3311900
10		.0000166	.0004318	.0037954	.0167423	.0492299	.1096776	.2000143
11		.0000025	.0001015	.0011358	.0062466	.0219419	.0566438	.1169380
12		.0000003	.0000207	.0003097	.0021287	.0089877	.0268859	.0630861
13			.0000039	.0000074	.0006657	.0033834	.0117678	.0314775
14			.0000007	.0000017	.0001919	.0011660	.0047644	.0145631
15			.0000001	.0000038	.0000312	.0003745	.0017901	.0068635
16				.0000007	.0000127	.0001118	.0006859	.0028107
17				.0000001	.0000029	.0000311	.0002042	.0009408
18					.0000006	.0000081	.0000623	.0003297
19					.0000001	.0000005	.0000020	.0000138
20						.0000005	.0000008	.0000036
21						.0000001	.0000001	.0000009
22							.0000003	.0000002
23							.0000001	.0000007
24								.0000008
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
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$$F(x, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

	.17	.18	.19	.20	.21	.22	.23	.24
30	.0001949	.0005349	.0013293	.0030212	.0053308	.0123188	.0223977	.0382613
31	.0000776	.0002274	.0006017	.0014520	.0032215	.0066203	.0126621	.0227736
32	.0000295	.0000924	.0002604	.0006673	.0015684	.0034059	.0066070	.0125918
33	.0000107	.0000359	.0001077	.0002934	.0007300	.0016775	.0035732	.0071035
34	.0000037	.0000133	.0000427	.0001173	.0003259	.0007912	.0017783	.0039226
35	.0000012	.0000047	.0000162	.0000497	.0001392	.0003574	.0008480	.0018700
36	.0000004	.0000016	.0000059	.0000192	.0000569	.0001547	.0003875	.0009004
37	.0000001	.0000005	.0000020	.0000071	.0000223	.0000641	.0001697	.0004157
38		.0000002	.0000007	.0000028	.0000094	.0000285	.0000742	.0001840
39			.0000002	.0000008	.0000030	.0000097	.0000287	.0000781
40			.0000001	.0000003	.0000010	.0000035	.0000111	.0000313
41				.0000001	.0000003	.0000012	.0000041	.0000124
42					.0000001	.0000004	.0000015	.0000046
43						.0000004	.0000015	.0000047
44							.0000015	.0000048
45							.0000015	.0000048
46								.0000001

	.25	.26	.27	.28	.29	.30	.31	.32
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	.9999992	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	.9999961	.9999985	.9999994	.9999998	.9999999	1.0000000	1.0000000	1.0000000
8	.9999833	.9999931	.9999972	.9999989	.9999996	.9999998	.9999999	1.0000000
9	.9999378	.9999729	.9999885	.9999952	.9999981	.9999992	.9999997	.9999999
10	.9997964	.9999669	.9999958	.9999982	.9999992	.9999996	.9999997	.9999999
11	.9994052	.9997142	.9998665	.9999323	.9999731	.9999984	.9999995	.9999998
12	.9984331	.9992087	.9995126	.9998154	.9999141	.9999614	.9999831	.9999926
13	.9962460	.9980132	.9989789	.9994901	.9997525	.9998832	.9999464	.9999777
14	.9917595	.9954262	.9975365	.9987110	.9993457	.9995771	.9998451	.9999278
15	.9833206	.9902970	.9945261	.9970038	.9984088	.9991786	.9995883	.9997795
16	.9686932	.9809259	.9887363	.9935498	.9964143	.9980675	.9993883	.9999056
17	.9452284	.9650804	.9784306	.9870855	.9925014	.9957761	.9976910	.9997747
18	.9102613	.9401912	.9613901	.9758470	.9833587	.9913857	.9950853	.9973792
19	.8616959	.9037544	.9351290	.9576365	.9721865	.9835458	.9902076	.9943467
20	.7986461	.8538934	.8972993	.9300544	.9538322	.9684547	.9816725	.9909720
21	.7219354	.7899500	.8462294	.8909632	.9249784	.9499892	.9676763	.9797403
22	.6342661	.7129218	.7814674	.8387017	.8845773	.9199101	.9461158	.9640453
23	.5399552	.6255789	.7041644	.7731861	.8313073	.8783071	.9149569	.9422820
24	.4442774	.5321806	.6171467	.6956434	.7650942	.8246425	.8721134	.9098253
25	.3525863	.4378356	.5346159	.6089462	.6873405	.7571806	.8166033	.8659917
26	.2694529	.3476724	.4315274	.5122403	.5899572	.6792388	.7494345	.8098847
27	.1980435	.2660382	.3428040	.4253382	.5033349	.5811503	.6713228	.7418454
28	.1398581	.1959259	.2625883	.3370245	.4122548	.5029627	.5855384	.6635781
29	.0948376	.1387397	.1937142	.2591045	.3331781	.4132653	.4960686	.5780759
30	.0617122	.0943978	.1374958	.1914153	.2555879	.3284095	.4073589	.4892785
31	.0385272	.0616806	.0938302	.1361350	.1890351	.2520390	.3266332	.4015558
32	.0230705	.0386902	.0615297	.0931406	.1346680	.1865707	.2484504	.3189351
33	.0132491	.0232920	.0387562	.0612674	.0923374	.1331000	.1840507	.2440463
34	.0072967	.0134553	.0234415	.0387308	.0609010	.0914283	.1314383	.1814548
35	.0035637	.0074579	.0136122	.0235228	.0386195	.0604371	.0904203	.1296888
36	.0019518	.0039660	.0075876	.0137213	.0235380	.0384271	.0598830	.0893192
37	.0009480	.0020235	.0040596	.0076854	.0137846	.0234917	.0381584	.0592412
38	.0004416	.0009904	.0020846	.0041343	.0077550	.0138033	.0233867	.0378179
39	.0001973	.0004651	.0010273	.0021350	.0041905	.00777945	.0137812	.0232265
40	.0000846	.0002096	.0004859	.0010504	.0021746	.0042285	.00770058	.0137184
41	.0000348	.0000906	.0002205	.0005037	.0010834	.0022035	.0042487	.0077907
42	.0000137	.0000376	.0000960	.0002301	.0005104	.0010229	.0022219	.0042418
43	.0000052	.0000149	.0000401	.0001009	.0002381	.0005300	.0011161	.0022209
44	.0000019	.0000057	.0000161	.0000424	.0001050	.0002446	.0005385	.0011235
45	.0000007	.0000021	.0000062	.0000171	.0000444	.0001004	.0002493	.0005417
46	.0000002	.0000007	.0000023	.0000066	.0000180	.0000461	.0001109	.0002527
47	.0000001	.0000002	.0000008	.0000025	.0000070	.0000188	.0000474	.0001127
48		.0000001	.0000003	.0000009	.0000026	.0000074	.0000194	.0000483
49			.0000001	.0000003	.0000009	.0000028	.0000076	.0000198
50				.0000001	.0000003	.0000010	.0000029	.0000078
51					.0000001	.0000003	.0000010	.0000030
52						.0000003	.0000011	.0000031
53							.0000003	.0000004
54								.0000001

	.33	.34	.35	.36	.37	.38	.39	.40
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	.9999992	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	.9999970	.9999988	.9999995	.9999998	.9999999	1.0000000	1.0000000	1.0000000
13	.9999896	.9999956	.9999982	.9999993	.9999997	.9999999	1.0000000	1.0000000
14	.9999673	.9999856	.9999938	.9999974	.9999990	.9999996	.9999999	.9999999
15	.9999051	.9999564	.9999805	.9999915	.9999964	.9999985	.9999994	.9999998
16	.9997460	.9998711	.9999432	.9999743	.9999887	.9999952	.9999980	.9999992
17	.9993687	.9996842	.9998465	.9999276	.9999668	.9999852	.9999916	.9999973

$$P(n, n_1, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 32

	.41	.42	.43	.44	.45	.46	.47	.48
48	.0197616	.0313093	.0478500	.0706308	.1008217	.1393448	.1866951	.2427813
49	.0116824	.0192020	.0304224	.0465174	.0687283	.0982338	.1359853	.1825276
50	.0066409	.0113281	.0186168	.0295045	.0451494	.0667868	.0956048	.1325843
51	.0036279	.0064263	.0109577	.0180086	.0285585	.0437490	.0648090	.0929369
52	.0019037	.0035084	.0061994	.0105700	.0173746	.0275873	.0423189	.0627977
53	.0009590	.0018330	.0033692	.0055618	.00910680	.01467324	.02265937	.0408621
54	.0004635	.0009267	.0017578	.0032292	.0057149	.0097536	.0160692	.0255804
55	.0002148	.0004436	.0008798	.0016786	.0030835	.0054601	.0093287	.0153926
56	.0000954	.0002048	.0004222	.0008368	.0015960	.0028332	.0051988	.0088952
57	.0000406	.0000906	.0001948	.0003998	.0007919	.0015109	.0027791	.0049325
58	.0000145	.0000384	.0000855	.0001829	.0003764	.0007457	.0014238	.0026823
59	.0000064	.0000155	.0000360	.0000801	.0001712	.0003324	.0006986	.0013354
60	.0000024	.0000060	.0000148	.0000335	.0000745	.0001593	.0003280	.0006509
61	.0000009	.0000022	.0000056	.0000134	.0000310	.0000687	.0001472	.0003034
62	.0000003	.0000008	.0000021	.0000051	.0000123	.0000284	.0000631	.0001351
63	.0000001	.0000003	.0000007	.0000019	.0000047	.0000112	.0000258	.0000574
64		.0000001	.0000002	.0000006	.0000017	.0000042	.0000101	.0000233
65			.0000001	.0000002	.0000006	.0000015	.0000037	.0000090
66				.0000001	.0000001	.0000005	.0000013	.0000033
67					.0000001	.0000002	.0000004	.0000011
68						.0000001	.0000001	.0000004
69							.0000001	.0000001
70								.0000001
71								

	.49	.50
72	1.0000000	1.0000000
73	1.0000000	1.0000000
74	1.0000000	1.0000000
75	1.0000000	1.0000000
76	1.0000000	1.0000000
77	1.0000000	1.0000000
78	1.0000000	1.0000000
79	1.0000000	1.0000000
80	1.0000000	1.0000000
81	.9999999	1.0000000
82	.9999998	.9999999
83	.9999997	.9999997
84	.9999997	.9999997
85	.9999996	.9999995
86	.9999993	.9999991
87	.9999989	.9999986
88	.9999980	.9999977
89	.9999963	.9999957
90	.9999915	.9999945
91	.9999312	.9999445
92	.9998545	.9998647
93	.9997635	.9997693
94	.9996577	.9996605
95	.9995393	.9995489
96	.9994150	.9994291
97	.9992853	.9992994
98	.9991509	.9991650
99	.9989110	.9989251
100	.9985594	.9985735
101	.9981003	.9981144
102	.9975433	.9975574
103	.9968883	.9969024
104	.9961353	.9961494
105	.9952853	.9952994
106	.9943353	.9943494
107	.9932853	.9932994
108	.9921353	.9921494
109	.9908853	.9908994
110	.9895353	.9895494
111	.9880853	.9880994
112	.9865353	.9865494
113	.9848853	.9848994
114	.9831353	.9831494
115	.9812853	.9812994
116	.9793353	.9793494
117	.9772853	.9772994
118	.9751353	.9751494
119	.9728853	.9728994
120	.9705353	.9705494
121	.9680853	.9680994
122	.9655353	.9655494
123	.9628853	.9628994
124	.9601353	.9601494
125	.9572853	.9572994
126	.9543353	.9543494
127	.9512853	.9512994
128	.9481353	.9481494
129	.9448853	.9448994
130	.9415353	.9415494
131	.9380853	.9380994
132	.9345353	.9345494
133	.9308853	.9308994
134	.9271353	.9271494
135	.9232853	.9232994
136	.9193353	.9193494
137	.9152853	.9152994
138	.9111353	.9111494
139	.9068853	.9068994
140	.9025353	.9025494
141	.8980853	.8980994
142	.8935353	.8935494
143	.8888853	.8888994
144	.8841353	.8841494
145	.8792853	.8792994
146	.8743353	.8743494
147	.8692853	.8692994
148	.8641353	.8641494
149	.8588853	.8588994
150	.8535353	.8535494
151	.8480853	.8480994
152	.8425353	.8425494
153	.8368853	.8368994
154	.8311353	.8311494
155	.8252853	.8252994
156	.8193353	.8193494
157	.8132853	.8132994
158	.8071353	.8071494
159	.8008853	.8008994
160	.7945353	.7945494
161	.7880853	.7880994
162	.7815353	.7815494
163	.7748853	.7748994
164	.7681353	.7681494
165	.7612853	.7612994
166	.7543353	.7543494
167	.7472853	.7472994
168	.7401353	.7401494
169	.7328853	.7328994
170	.7255353	.7255494
171	.7180853	.7180994
172	.7105353	.7105494
173	.7028853	.7028994
174	.6951353	.6951494
175	.6872853	.6872994
176	.6793353	.6793494
177	.6712853	.6712994
178	.6631353	.6631494
179	.6548853	.6548994
180	.6465353	.6465494
181	.6380853	.6380994
182	.6295353	.6295494
183	.6208853	.6208994
184	.6121353	.6121494
185	.6032853	.6032994
186	.5943353	.5943494
187	.5852853	.5852994
188	.5761353	.5761494
189	.5668853	.5668994
190	.5575353	.5575494
191	.5480853	.5480994
192	.5385353	.5385494
193	.5288853	.5288994
194	.5191353	.5191494
195	.5092853	.5092994
196	.5003353	.5003494
197	.4912853	.4912994
198	.4821353	.4821494
199	.4728853	.4728994
200	.4635353	.4635494
201	.4540853	.4540994
202	.4445353	.4445494
203	.4348853	.4348994
204	.4251353	.4251494
205	.4152853	.4152994
206	.4053353	.4053494
207	.3952853	.3952994
208	.3851353	.3851494
209	.3748853	.3748994
210	.3645353	.3645494
211	.3540853	.3540994
212	.3435353	.3435494
213	.3328853	.3328994
214	.3221353	.3221494
215	.3112853	.3112994
216	.3003353	.3003494
217	.2892853	.2892994
218	.2781353	.2781494
219	.2668853	.2668994
220	.2555353	.2555494
221	.2440853	.2440994
222	.2325353	.2325494
223	.2208853	.2208994
224	.2091353	.2091494
225	.1972853	.1972994
226	.1853353	.1853494
227	.1732853	.1732994
228	.1611353	.1611494
229	.1488853	.1488994
230	.1365353	.1365494
231	.1240853	.1240994
232	.1115353	.1115494
233	.0988853	.0988994
234	.0861353	.0861494
235	.0732853	.0732994
236	.0603353	.0603494
237	.0472853	.0472994
238	.0341353	.0341494
239	.0208853	.0208994
240	.0075353	.0075494
241	.0000853	.0000994
242	.0000000	.0000000
243	.0000000	.0000000
244	.0000000	.0000000
245	.0000000	.0000000
246	.0000000	.0000000
247	.0000000	.0000000
248	.0000000	.0000000
249	.0000000	.0000000
250	.0000000	.0000000

AMCF 706-109

$$P(n, n, D) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 33

λp	.01	.02	.03	.04	.05	.06	.07	.08
1	.4072890	.8472346	.9411466	.9775496	.9915220	.9983312	.9998280	.99995718
2	.2383786	.5878921	.7718674	.8905543	.9500242	.9780009	.9906243	.9961014
3	.0669657	.2851011	.5210371	.7238129	.8495559	.9227905	.9692197	.9882132
4	.0144453	.1166020	.3051035	.5130706	.6891593	.8158551	.9073684	.9456445
5	.0025088	.0392299	.1478817	.3154996	.4992158	.6622777	.7875391	.8740598
6	.0003636	.0111233	.0413287	.1089478	.2381268	.4077076	.6403913	.7638592
7	.0000447	.0027105	.0082075	.0294206	.0839066	.2244351	.4779491	.6819463
8	.0000048	.0005766	.0029759	.0130479	.0408584	.1248455	.3059867	.4692878
9	.0000005	.0001085	.0019584	.0122768	.0432141	.1059250	.2803080	.3264661
10		.0000182	.0004928	.0119430	.0179436	.0523204	.1156200	.2098887
11		.0000028	.0001120	.0018422	.0067714	.0235792	.0603356	.1235841
12		.0000004	.0000232	.0003487	.0021346	.0097367	.0289669	.0673943
13			.0000044	.0000867	.0007389	.0036991	.0128886	.0340062
14			.0000008	.0000215	.0002156	.0012978	.0052346	.0159163
15			.0000001	.0000043	.0000588	.0004220	.0019983	.0069875
16				.0000009	.0000146	.0001276	.0007074	.0028109
17				.0000002	.0000034	.0000360	.0002338	.0010658
18					.0000007	.0000095	.0000723	.0003745
19					.0000002	.0000023	.0000210	.0001182
20						.0000005	.0000057	.0000335
21						.0000001	.0000015	.0000117
22							.0000004	.0000033
23							.0000001	.0000009
24								.0000002
25								.0000001
26								
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$$H(n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 73

X	.41	.42	.43	.44	.45	.46	.47	.48
47	.0326387	.0587129	.0948428	.1280973	.1441744	.1398254	.1207813	.0940064
48	.0848461	.0388000	.0884450	.0850346	.1184498	.1630847	.2157831	.2782090
49	.0149349	.0248872	.0378188	.0571273	.0832703	.1171449	.1686889	.2344994
50	.0087079	.0146357	.0246938	.0369902	.0567549	.0812524	.1145838	.1566871
51	.0046638	.0084855	.0148511	.0230448	.0360844	.0543464	.0782831	.1119674
52	.0022106	.0047104	.0082458	.0138430	.0224101	.0350217	.0528893	.0772645
53	.0013443	.0028598	.0048888	.0079694	.0134138	.0217857	.0338848	.0513919
54	.0006868	.0013039	.0024307	.0044316	.0077188	.0129638	.0210158	.0328910
55	.0003168	.0006440	.0012573	.0023508	.0042677	.0074391	.0124968	.0208888
56	.0001444	.0003031	.0006190	.0012072	.0022654	.0040954	.0071199	.01180140
57	.0000631	.0001386	.0002882	.0005920	.0011039	.0021651	.0039164	.0068344
58	.0000284	.0000603	.0001339	.0002783	.0005834	.0010977	.0020408	.0037318
59	.0000118	.0000281	.0000573	.0001233	.0002654	.0005333	.0010394	.0019831
60	.0000051	.0000100	.0000238	.0000540	.0001180	.0002481	.0005081	.0009795
61	.0000015	.0000038	.0000094	.0000223	.0000506	.0001104	.0002321	.0004708
62	.0000008	.0000014	.0000036	.0000081	.0000207	.0000470	.0001026	.0002138
63	.0000003	.0000008	.0000013	.0000033	.0000081	.0000191	.0000433	.0000947
64	.0000001	.0000002	.0000004	.0000012	.0000030	.0000074	.0000178	.0000396
65		.0000001	.0000001	.0000004	.0000011	.0000037	.0000097	.0000218
66				.0000001	.0000004	.0000010	.0000035	.0000080
67					.0000001	.0000003	.0000009	.0000028
68						.0000001	.0000003	.0000007
69							.0000001	.0000002
70								.0000001
71								
72								

X	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	1.0000000	1.0000000
8	1.0000000	1.0000000
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15	1.0000000	1.0000000
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17	1.0000000	1.0000000
18	1.0000000	1.0000000
19	1.0000000	1.0000000
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21	1.0000000	1.0000000
22	.9999999	.9999999
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71	.9999999	.9999999
72	.9999999	.9999999

$$r(n, n, 1) = \sum_{i=1}^n \binom{n}{i} (-1)^{i-1} \frac{1}{i}.$$

• 56 •

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 94

	.17	.18	.19	.20	.21	.22	.23	.24
29	.0006922	.0017406	.0039768	.0083339	.0161484	.0291345	.0492440	.0784042
30	.0002972	.0007980	.0019403	.0043139	.0088433	.0168343	.0299461	.0500566
31	.0001220	.0003497	.0009053	.0021364	.0046359	.0093175	.0174567	.0306606
32	.0000478	.0001465	.0004040	.0010126	.0023269	.0049405	.0097546	.0180158
33	.0000179	.0000587	.0001726	.0004594	.0011866	.0025099	.0052256	.0101542
34	.0000064	.0000225	.0000706	.0001996	.0005151	.0012220	.0026638	.0054899
35	.0000022	.0000083	.0000276	.0000831	.0002272	.0005702	.0013217	.0028473
36	.0000007	.0000029	.0000104	.0000331	.0000961	.0002551	.0006242	.0014167
37	.0000003	.0000010	.0000037	.0000127	.0000389	.0001094	.0002827	.0006763
38	.0000001	.0000003	.0000013	.0000046	.0000151	.0000450	.0001228	.0003098
39		.0000001	.0000004	.0000016	.0000056	.0000178	.0000512	.0001362
40			.0000001	.0000005	.0000020	.0000067	.0000205	.0000574
41				.0000002	.0000007	.0000024	.0000079	.0000233
42				.0000001	.0000002	.0000009	.0000029	.0000090
43					.0000001	.0000003	.0000010	.0000034
44						.0000001	.0000003	.0000012
45							.0000001	.0000004
46								.0000001
	.35	.26	.27	.28	.29	.30	.31	.32
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	.9999995	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	.9999997	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
8	.9999991	.9999995	.9999993	.9999993	.9999998	.9999999	1.0000000	1.0000000
9	.9999985	.9999982	.9999977	.9999971	.9999989	.9999996	.9999999	.9999999
10	.9999961	.9999931	.9999973	.9999887	.9999953	.9999981	.9999993	.9999997
11	.9999552	.9999059	.9999116	.9999609	.9999832	.9999929	.9999971	.9999989
12	.9998829	.9994510	.9997379	.9998784	.9999451	.9999759	.9999897	.9999957
13	.9997263	.9985886	.9992934	.9996565	.9998377	.9999255	.9999668	.9999856
14	.9993890	.9966774	.9982565	.9991121	.9995611	.9997893	.9999017	.9999555
15	.9972930	.9922923	.9960374	.9978874	.9989072	.9994514	.9997326	.9998734
16	.9756201	.9855121	.9916602	.9953471	.9974829	.9986790	.9993273	.9996675
17	.9564085	.9728824	.9836665	.9904695	.9946103	.9970447	.9984883	.9991890
18	.9270260	.9525223	.9701010	.9817663	.9892270	.9938311	.9965751	.9981560
19	.8851287	.9219209	.9486370	.9672870	.9798209	.9879393	.9930135	.9960763
20	.8292657	.8769136	.9168840	.9447657	.9644533	.9778392	.9866128	.9921617
21	.7594370	.8222486	.8728419	.9115209	.9409148	.9616369	.9758291	.9852536
22	.6774159	.7520219	.8154407	.8669114	.9070358	.9370928	.9587568	.9737981
23	.5866956	.6702999	.7449938	.8088310	.8611191	.9022318	.9333058	.9559104
24	.4920309	.5803384	.6634281	.7381244	.8024088	.8554617	.8975108	.9295552
25	.4181684	.5169303	.6017330	.6739375	.7383498	.7947137	.8429354	.8828742
26	.3115545	.3948400	.4817546	.5682030	.6503338	.7250067	.7900870	.8453564
27	.2344810	.3090645	.3910322	.4767860	.5603881	.6440751	.7187293	.7841687
28	.1897773	.2531632	.3265250	.4072540	.4719142	.5357203	.6079874	.6786218
29	.1181684	.1693503	.2317330	.3039375	.3834981	.4671371	.5511657	.6325665
30	.0790169	.1102338	.1687763	.2301578	.3013039	.3797604	.4624319	.5457714
31	.0507407	.0794794	.1183247	.1680652	.2285639	.2986249	.3760364	.4577945
32	.0312819	.0513027	.0798005	.1181810	.1672257	.2268368	.2959013	.3723217
33	.0185120	.0318123	.0517484	.0799884	.1179014	.1652656	.2250211	.2931337
34	.0105147	.0189464	.0322501	.0520833	.0800503	.1174939	.1651953	.2231208
35	.0057320	.0108361	.0193199	.0326136	.0523127	.0799931	.1169657	.1640095
36	.0029991	.0059512	.0111182	.0196338	.0328908	.0524414	.0798228	.1163231
37	.0015061	.0031383	.0061167	.0113612	.0198866	.0335896	.0524741	.0795453
38	.0007259	.0015891	.0032643	.0064181	.0115653	.0200089	.0332132	.0524154
39	.0003350	.0007726	.0016651	.0033763	.0064652	.0117332	.0202331	.0332644
40	.0001492	.0003607	.0008158	.0017336	.0034741	.0065880	.0118594	.0203240
41	.0000636	.0001617	.0003839	.0008552	.0017942	.0035572	.0066865	.0119507
42	.0000260	.0000696	.0001735	.0004613	.0009905	.0019464	.0038464	.0067413
43	.0000102	.0000288	.0000753	.0001845	.0004247	.0009212	.0018902	.0036792
44	.0000039	.0000114	.0000314	.0000807	.0001946	.0004417	.0009474	.0019253
45	.0000014	.0000043	.0000126	.0000339	.0000857	.0002035	.0004564	.0009687
46	.0000005	.0000016	.0000048	.0000137	.0000362	.0000901	.0002115	.0004685
47	.0000002	.0000006	.0000018	.0000053	.0000147	.0000383	.0000940	.0002178
48	.0000001	.0000002	.0000006	.0000020	.0000057	.0000156	.0000402	.0000972
49		.0000001	.0000002	.0000007	.0000021	.0000061	.0000165	.0000417
50			.0000001	.0000002	.0000008	.0000023	.0000065	.0000172
51				.0000001	.0000003	.0000008	.0000025	.0000068
52					.0000001	.0000003	.0000009	.0000026
53						.0000001	.0000003	.0000009
54							.0000001	.0000003
55								.0000001

	.33	.34	.35	.36	.37	.38	.39	.40
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	.9999996	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	.9999983	.9999993	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
13	.9999939	.9999975	.9999990	.9999996	.9999999	.9999999	1.0000000	1.0000000
14	.9999884	.9999916	.9999965	.9999986	.9999994	.9999998	.9999999	1.0000000
15	.9999418	.9999740	.9999887	.9999952	.9999981	.9999992	.9999997	.9999999
16	.9998804	.9999257	.9999664	.9999852	.9999937	.9999974	.9999990	.9999996

AMCP 706-109

$$F(n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 94

x	.33	.34	.35	.36	.37	.38	.39	.40
17	.9995939	.9998027	.9998000	.9999574	.9999811	.9999918	.9999966	.9999986
18	.9998369	.9998120	.9997601	.9998855	.9999470	.9999762	.9999896	.9999956
19	.9978632	.9988714	.9994218	.9997127	.9998615	.9999352	.9999706	.9999871
20	.9925509	.9975515	.9986933	.9993237	.9996606	.9998348	.9999220	.9999643
21	.9912801	.9950015	.9972221	.9985032	.9992180	.9996039	.9998055	.9999074
22	.9838675	.9901726	.9944308	.9968769	.9983022	.9991053	.9995430	.9997738
23	.9717530	.9824601	.9894434	.9938414	.9965175	.9980913	.9990861	.9994781
24	.9530742	.9627001	.9681366	.9744964	.9823263	.9914537	.9978715	.9998810
25	.9285875	.9502339	.9676450	.9796018	.9875351	.9926180	.9967653	.9991640
26	.8883288	.9222042	.9474545	.9655929	.9781605	.9865640	.9919894	.9953723
27	.8392605	.8838566	.9186025	.9446806	.9638488	.9767170	.9855860	.9913530
28	.7784004	.8341037	.8794755	.9150548	.9419362	.9615169	.9752753	.9846047
29	.7066725	.7727741	.8290619	.8751791	.9115633	.9392247	.9655014	.9758395
30	.6262694	.7008704	.7672819	.8241312	.8709665	.9081297	.9365495	.9575060
31	.5404660	.6206143	.6952052	.7619166	.8193075	.8668369	.9047554	.9339333
32	.4532147	.5322588	.6150802	.6896674	.7566713	.8145870	.8627892	.9014415
33	.3686125	.4486908	.5301400	.6096571	.6842483	.7515396	.8099660	.8588223
34	.2890222	.3649052	.4442098	.5251007	.6043356	.6789395	.7465151	.8054408
35	.2211394	.2874069	.3611959	.4397671	.5201325	.5991069	.6737333	.7435928
36	.1627248	.2190798	.2845676	.3574812	.4353566	.5152276	.5939630	.6666224
37	.1155718	.1611423	.2169447	.2816239	.3537579	.4309724	.5103784	.5888962
38	.0791657	.1147172	.1598660	.2147362	.2786354	.3500228	.4266090	.5055787
39	.0522686	.0786887	.1137630	.1582997	.2124560	.2756014	.3462726	.4232612
40	.0332461	.0520303	.0742190	.1127163	.1566465	.2104056	.2732211	.3435048
41	.0203633	.0331609	.0517280	.0774605	.1154902	.1549096	.2047663	.2639337
42	.0128004	.0203528	.0330117	.0513410	.0767170	.1103532	.1530913	.2051991
43	.0069119	.0120265	.0202942	.0328009	.0508007	.0758922	.1094446	.1511941
44	.0037180	.0068395	.0120130	.0201893	.0325311	.0505308	.0749893	.1076358
45	.0019157	.0037423	.0068445	.0119667	.0200399	.0322049	.0497524	.0740115
46	.0009851	.0019695	.0037523	.0068275	.0118887	.0198479	.0318246	.0490903
47	.0004780	.0009566	.0019786	.0037482	.0067892	.0117803	.0196150	.0313925
48	.0002229	.0004458	.0009032	.0019793	.0037306	.0067304	.0116428	.0194430
49	.0000999	.0002267	.0004490	.0009050	.0019717	.0036998	.0066520	.0114774
50	.0000430	.0001016	.0002290	.0004905	.0009109	.0019561	.0036565	.0065547
51	.0000178	.0000439	.0001031	.0002303	.0004893	.0009942	.0019328	.0036011
52	.0000070	.0000182	.0000445	.0001036	.0002296	.0004856	.0009821	.0019022
53	.0000027	.0000072	.0000185	.0000448	.0001035	.0002278	.0004794	.0009657
54	.0000010	.0000026	.0000074	.0000186	.0000448	.0001026	.0002248	.0004709
55	.0000003	.0000008	.0000028	.0000074	.0000186	.0000448	.0001012	.0002205
56	.0000001	.0000001	.0000010	.0000028	.0000074	.0000184	.0000437	.0000991
57		.0000001	.0000004	.0000010	.0000028	.0000073	.0000181	.0000427
58			.0000001	.0000004	.0000010	.0000028	.0000072	.0000176
59				.0000001	.0000004	.0000010	.0000027	.0000170
60					.0000001	.0000004	.0000010	.0000166
61						.0000001	.0000003	.0000160
62							.0000001	.0000153
63								.0000146
64								.0000139
65								.0000132
66								.0000125
67								.0000118
68								.0000111
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82								.0000013
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200								.0000000

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 94

x	.41	.42	.43	.44	.45	.46	.47	.48
47	.0481664	.0718425	.1030291	.1428522	.1917629	.2495738	.3153611	.3874638
48	.0309111	.0475834	.0706566	.1013421	.1403859	.1888770	.2460814	.3113373
49	.0190339	.0303826	.0467440	.0694065	.0995861	.1382496	.1859247	.2425306
50	.0112855	.0186893	.0298091	.0458505	.0680946	.0977629	.1358442	.1829054
51	.0064395	.0110686	.0183112	.0291931	.0449054	.0667231	.0958743	.1333706
52	.0035342	.0063075	.0108279	.0179015	.0285366	.0439110	.0652943	.0939220
53	.0018647	.0034566	.0061597	.0105650	.0174618	.0278418	.0428498	.0638104
54	.0009453	.0018206	.0033609	.0059970	.0102813	.0169943	.0271111	.0417839
55	.0004602	.0009211	.0017705	.0032720	.0058207	.0099783	.0165007	.0263465
56	.0002150	.0004474	.0008935	.0017148	.0031664	.0056318	.0096576	.0159830
57	.0000964	.0002085	.0004327	.0008627	.0016540	.0030531	.0054114	.0093207
58	.0000414	.0000932	.0002010	.0004164	.0008291	.0015887	.0029329	.0052809
59	.0000171	.0000359	.0000895	.0001926	.0003985	.0007929	.0015195	.0028064
60	.0000067	.0000164	.0000382	.0000854	.0001835	.0003793	.0007547	.0014468
61	.0000025	.0000064	.0000156	.0000363	.0000809	.0001738	.0003590	.0007146
62	.0000009	.0000024	.0000061	.0000147	.0000341	.0000762	.0001635	.0003379
63	.0000003	.0000009	.0000023	.0000057	.0000138	.0000319	.0000712	.0001528
64	.0000001	.0000003	.0000008	.0000021	.0000053	.0000128	.0000296	.0000651
65		.0000001	.0000003	.0000007	.0000020	.0000049	.0000118	.0000273
66			.0000001	.0000003	.0000007	.0000018	.0000045	.0000107
67				.0000001	.0000002	.0000006	.0000016	.0000040
68					.0000001	.0000002	.0000006	.0000014
69						.0000001	.0000002	.0000005
70							.0000001	.0000002

x	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	1.0000000	1.0000000
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10	1.0000000	1.0000000
11	1.0000000	1.0000000
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13	1.0000000	1.0000000
14	1.0000000	1.0000000
15	1.0000000	1.0000000
16	1.0000000	1.0000000
17	1.0000000	1.0000000
18	1.0000000	1.0000000
19	1.0000000	1.0000000
20	1.0000000	1.0000000
21	1.0000000	1.0000000
22	.9999999	1.0000000
23	.9999997	.9999999
24	.9999991	.9999996
25	.9999972	.9999989
26	.9999923	.9999968
27	.9999799	.9999913
28	.9999497	.9999775
29	.9998802	.9999444
30	.9997285	.9998692
31	.9994125	.9997060
32	.9987857	.9993693
33	.9976001	.9987063
34	.9954600	.9974608
35	.9917709	.9952261
36	.9856949	.9913952
37	.9761274	.9851168
38	.9617178	.9752750
39	.9409511	.9605122
40	.9123016	.9393144
41	.8744534	.9101675
42	.8265594	.8717788
43	.7684918	.8233360
44	.7010243	.7647539
45	.6258901	.6968520
46	.5456814	.6214053
47	.4615923	.5410183
48	.3830443	.4589615
49	.3072474	.3785945
50	.2389195	.3031480
51	.1798187	.2352461
52	.1308293	.1766640
53	.0929076	.1289212
54	.0652734	.0898325
55	.0406538	.0606856
56	.0255504	.0394878
57	.0154432	.0247850
58	.0089692	.0148832
59	.0050013	.0086048
60	.0026751	.0047739
61	.0013714	.0025392
62	.0006738	.0012937
63	.0003181	.0006307
64	.0001419	.0002940
65	.0000608	.0001308

AMCF 706-109

$$P(c,n,p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 94

$\frac{c}{n}$	.49	.50
66	.00000249	.0000516
67	.00000097	.0000228
68	.00000036	.0000097
69	.00000013	.0000038
70	.00000004	.0000011
71	.00000001	.0000004
72		.0000001

$$H(n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 95

	.01	.02	.03	.04	.05	.06	.07	.08
1	.6151039	.8532841	.9446249	.9793097	.9923486	.9972001	.9989864	.9996371
2	.2457592	.5688349	.7819247	.8974105	.9540914	.9802218	.9917384	.9963388
3	.0704137	.2959959	.5454225	.7370246	.8594853	.9292871	.9665975	.9843850
4	.0155074	.1233834	.3186729	.5298593	.7050491	.8285012	.9062690	.9513532
5	.0027516	.0423613	.1573768	.3313263	.5181363	.6805391	.8028948	.8852894
6	.0004066	.0122673	.0665854	.1807720	.3390935	.5086511	.6608093	.7807363
7	.0000512	.0030549	.0244657	.0866755	.1977439	.3440775	.5006161	.6443628
8	.0000056	.0006645	.0079032	.0368268	.1031566	.2105178	.3473128	.4935895
9	.0000005	.0001279	.0022683	.0134795	.0483955	.1167418	.2203843	.3493716
10		.0000220	.0005839	.0047771	.0205348	.0588801	.1280313	.2281450
11		.0000034	.0001358	.0014795	.0079239	.0271177	.0662501	.1374885
12		.0000005	.0000288	.0004178	.0027951	.0114515	.0334800	.0765731
13		.0000001	.0000056	.0001082	.0009056	.0044517	.0151603	.0394948
14			.0000010	.0000258	.0002706	.0015991	.0063565	.0189086
15			.0000002	.0000057	.0000749	.0005326	.0024753	.0084240
16				.0000012	.0000193	.0001650	.0008978	.0035007
17				.0000002	.0000046	.0000477	.0003041	.0013602
18					.0000010	.0000129	.0000964	.0004953
19					.0000002	.0000033	.0000287	.0001693
20						.0000008	.0000080	.0000545
21						.0000002	.0000021	.0000165
22							.0000005	.0000047
23							.0000001	.0000013
24								.0000003
25								.0000001
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$$P(x, n, p) = \sum_{i=0}^n \binom{n}{i} p^i (1-p)^{n-i}$$

n = 45

x	.17	.18	.19	.20	.21	.22	.23	.24
28	.0018336	.0042738	.0090829	.0177616	.0322100	.0545427	.0867664	.1303751
29	.0008163	.0020802	.0047016	.0097470	.0186842	.0333508	.0557731	.0870705
30	.0003844	.0009677	.0023272	.0051179	.0103774	.0195404	.0343846	.0568600
31	.0001519	.0004304	.0011019	.0027219	.00655135	.0109712	.0203292	.0353158
32	.0000604	.0001611	.0004493	.0012173	.0032811	.0075903	.011263	.0210506
33	.0000230	.0000746	.0002165	.0005700	.0017223	.004444	.0082673	.0120409
34	.0000084	.0000291	.0000899	.0002516	.0006418	.0015053	.0032684	.0065093
35	.0000029	.0000108	.0000358	.0001064	.0002877	.0007136	.0016350	.0034815
36	.0000010	.0000039	.0000136	.0000411	.0001216	.0003244	.0007846	.0017600
37	.0000003	.0000013	.0000050	.0000167	.0000569	.0001415	.0003613	.0008840
38	.0000001	.0000004	.0000017	.0000062	.0000201	.0000592	.0001596	.0003977
39		.0000001	.0000006	.0000023	.0000076	.0000238	.0000677	.0001778
40			.0000002	.0000008	.0000028	.0000091	.0000275	.0000763
41			.0000001	.0000003	.0000010	.0000034	.0000108	.0000315
42				.0000001	.0000003	.0000012	.0000040	.0000124
43					.0000001	.0000004	.0000015	.0000047
44						.0000001	.0000005	.0000017
45							.0000002	.0000006
46							.0000001	.0000002
47								.0000001

x	.25	.26	.27	.28	.29	.30	.31	.32
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	.9999996	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	.9999980	.9999992	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
8	.9999912	.9999965	.9999986	.9999995	.9999998	.9999999	1.0000000	1.0000000
9	.9999661	.9999858	.9999942	.9999977	.9999991	.9999997	.9999999	1.0000000
10	.9999855	.9999996	.9999970	.9999991	.9999996	.9999998	.9999999	.9999999
11	.9999542	.9999802	.9999883	.9999967	.9999986	.9999994	.9999997	.9999999
12	.9999585	.9999833	.9999780	.9999915	.9999956	.9999981	.9999992	.9999996
13	.9997684	.9998128	.9998413	.9998716	.9999089	.9999406	.9999739	.9999888
14	.9997182	.9997741	.9998364	.9999266	.9999643	.9999810	.9999929	.9999961
15	.999345	.9998024	.9998366	.99982303	.9998968	.99995527	.9999785	.9999897
16	.9975384	.9974049	.9972820	.9970584	.9978959	.9989107	.9994529	.9997334
17	.9612114	.9761661	.9858248	.9918352	.9954434	.9975350	.9987070	.9993421
18	.9343716	.9578159	.9737637	.9842032	.9907882	.9947952	.9971496	.9984866
19	.8956031	.9298773	.9544328	.9715418	.9835487	.9907668	.9941176	.9967418
20	.8432315	.8900955	.9254575	.9510718	.9689099	.9808692	.9895970	.9934144
21	.7768941	.8369815	.8847333	.9211174	.9477410	.9664765	.9791721	.9874642
22	.6979211	.7703327	.8309390	.8795141	.9168607	.9444470	.9640492	.9774639
23	.6093756	.6915659	.7640145	.8250935	.8744350	.9126901	.9411956	.9616345
24	.5156971	.6037284	.6854508	.7579222	.8194348	.8694927	.9086072	.9379916
25	.4220185	.5111429	.5948775	.6759557	.7520402	.8139533	.8646838	.9046134
26	.3333361	.4187576	.5067096	.5930043	.6738625	.7463539	.8086400	.8600045
27	.2517493	.3311661	.4155277	.5023042	.5878924	.6683546	.7408508	.8034864
28	.1859532	.2588975	.3293421	.4123235	.4981552	.5829268	.6630174	.7355168
29	.1310706	.1859417	.2519268	.3272662	.4091402	.4940121	.5780948	.6578374
30	.0888047	.1315907	.1857746	.2508450	.3251402	.4059734	.4899456	.5733826
31	.0578098	.0895784	.1319467	.1854623	.2496585	.3229656	.4028190	.4859472
32	.0361466	.0586246	.0908020	.1321486	.1850138	.2483732	.3207432	.3996730
33	.0217045	.0368794	.0550325	.0806823	.1122055	.1444369	.1859939	.23184739
34	.0125141	.0222915	.0375183	.0598967	.0910271	.1321254	.1837386	.2455249
35	.0069277	.0129448	.0228124	.0380651	.0603566	.0912433	.1319157	.1829251
36	.0036823	.0072213	.0133327	.0232682	.0385231	.0607069	.0913371	.1315827
37	.0018793	.0038697	.0074890	.0136775	.0236600	.0388952	.0609522	.0913142
38	.0009210	.0019119	.0040425	.0077302	.0139794	.0239891	.0391841	.0610968
39	.0004334	.0009849	.0020969	.0042800	.0079443	.0142385	.0242569	.0393926
40	.0001958	.0004678	.0010451	.0021936	.0043415	.00831310	.0144553	.0244649
41	.0000850	.0002134	.0005005	.0011012	.0022813	.0044664	.0082901	.0146302
42	.0000354	.0000935	.0002303	.0005313	.0011255	.0023597	.0045745	.0084217
43	.0000142	.0000374	.0000918	.0002444	.0005597	.0011988	.0024282	.0046654
44	.0000055	.0000159	.0000433	.0001092	.0002613	.0005856	.0012396	.0024866
45	.0000020	.0000062	.0000177	.0000470	.0001172	.0002750	.0006086	.0012748
46	.0000007	.0000023	.0000069	.0000193	.0000506	.0001241	.0002875	.0006886
47	.0000002	.0000008	.0000026	.0000076	.0000239	.0000538	.0001303	.0002990
48	.0000001	.0000003	.0000009	.0000029	.0000083	.0000224	.0000560	.0001358
49		.0000001	.0000003	.0000011	.0000032	.0000090	.0000238	.0000595
50			.0000001	.0000004	.0000012	.0000035	.0000096	.0000250
51				.0000001	.0000004	.0000013	.0000037	.0000101
52					.0000001	.0000005	.0000014	.0000039
53						.0000002	.0000005	.0000015
54						.0000001	.0000002	.0000005
55							.0000001	.0000002
56								.0000001

x	.33	.34	.35	.36	.37	.38	.39	.40
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	.9999987	.9999995	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
13	.9999954	.9999981	.9999993	.9999997	.9999999	1.0000000	1.0000000	1.0000000
14	.9999921	.9999973	.9999984	.9999990	.9999996	.9999998	1.0000000	1.0000000
15	.9999874	.9999960	.9999974	.9999984	.9999996	.9999994	.9999998	.9999999

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$$P(e, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 95

xp	.41	.42	.43	.44	.45	.46	.47	.48
46	.0865844	.1285057	.1675316	.2217780	.2846328	.3547103	.4299183	.5076364
47	.0584504	.0856195	.1210370	.1656136	.2193239	.2816679	.3513144	.4282249
48	.0380678	.0577732	.0845768	.1196065	.1636156	.2167976	.2786420	.3470700
49	.0239075	.0376069	.0570364	.0834582	.1180360	.1615382	.2141903	.2755570
50	.0144624	.0236005	.0370911	.0562151	.0822658	.1163858	.1593820	.2115885
51	.0084264	.0142693	.0232553	.0365223	.0553405	.0810014	.1146602	.1571473
52	.0047254	.00803072	.0140457	.0238698	.0359025	.0544046	.0756669	.1128573
53	.0025492	.0046540	.0081670	.0137930	.0238455	.0352337	.0534093	.0782640
54	.0013222	.0025777	.0045690	.0080069	.0135125	.0235842	.0345127	.0533566
55	.0006591	.0012999	.0024578	.0044710	.0078280	.0132057	.0214876	.0337565
56	.0003156	.0006464	.0013706	.0023929	.0041608	.0076312	.0128739	.0209575
57	.0001450	.0003089	.0006309	.0012376	.0023346	.0042323	.0074157	.0125186
58	.0000640	.0001416	.0003007	.0006127	.0012003	.0022824	.0041072	.0071888
59	.0000270	.0000623	.0001375	.0002911	.0005922	.0011590	.0021810	.0039554
60	.0000110	.0000263	.0000602	.0001326	.0002803	.0005696	.0011141	.0020995
61	.0000043	.0000106	.0000253	.0000579	.0001271	.0002603	.0005450	.0010661
62	.0000016	.0000041	.0000102	.0000242	.0000552	.0001211	.0002554	.0005187
63	.0000006	.0000015	.0000039	.0000097	.0000229	.0000523	.0001146	.0002417
64	.0000002	.0000005	.0000014	.0000037	.0000091	.0000216	.0000442	.0000977
65	.0000001	.0000002	.0000005	.0000013	.0000035	.0000085	.0000202	.0000459
66		.0000001	.0000002	.0000005	.0000013	.0000032	.0000074	.0000187
67			.0000001	.0000002	.0000004	.0000012	.0000029	.0000072
68					.0000001	.0000004	.0000010	.0000027
69						.0000001	.0000001	.0000006
70							.0000001	.0000003
71								.0000001

xp	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
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6	1.0000000	1.0000000
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13	1.0000000	1.0000000
14	1.0000000	1.0000000
15	1.0000000	1.0000000
16	1.0000000	1.0000000
17	1.0000000	1.0000000
18	1.0000000	1.0000000
19	1.0000000	1.0000000
20	1.0000000	1.0000000
21	1.0000000	1.0000000
22	.9999999	1.0000000
23	.9999998	.9999999
24	.9999994	.9999998
25	.9999991	.9999993
26	.9999987	.9999979
27	.9999980	.9999941
28	.9999965	.9999844
29	.9999943	.9999610
30	.9999918	.9999368
31	.9999873	.9999176
32	.9999818	.9998937
33	.9999748	.9998658
34	.9999665	.9998346
35	.9999578	.9997994
36	.9999477	.9997606
37	.9999362	.9997186
38	.9999235	.9996739
39	.9999098	.9996270
40	.9998951	.9995783
41	.9998795	.9995273
42	.9998630	.9994744
43	.9998457	.9994191
44	.9998278	.9993619
45	.9998093	.9993033
46	.9997903	.9992437
47	.9997708	.9991833
48	.9997509	.9991214
49	.9997306	.9990583
50	.9997100	.9989933
51	.9996891	.9989274
52	.9996679	.9988608
53	.9996464	.9987936
54	.9996247	.9987259
55	.9996028	.9986577
56	.9995807	.9985890
57	.9995584	.9985199
58	.9995359	.9984504
59	.9995132	.9983806
60	.9994904	.9983104
61	.9994675	.9982400
62	.9994444	.9981693
63	.9994212	.9980983
64	.9993979	.9980270
65	.9993745	.9979554

$$P(x, n, p) = \sum_{r=0}^x \binom{n}{r} p^r (1-p)^{n-r}$$

	.49	.50
66	.00000425	.00000332
67	.00000171	.00000140
68	.00000066	.00000056
69	.00000024	.00000019
70	.00000008	.00000003
71	.00000003	.00000001
72	.00000001	.00000000
73		.00000001

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$$P(o, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 96

	.01	.02	.03	.04	.05	.06	.07	.08
1	.6189529	.0562184	.9468061	.9801373	.9927311	.9973681	.9990573	.9996661
2	.2494576	.5745239	.7868038	.9008865	.9560043	.9812405	.9902857	.9966787
3	.0721672	.3014826	.5525176	.7434401	.8641870	.9323431	.9678924	.9853653
4	.0160566	.1268357	.3284754	.5181462	.7127494	.8345484	.9104570	.9539957
5	.0028791	.0439817	.1628157	.3392677	.5374819	.6894168	.8090450	.8805745
6	.0004300	.0128692	.0693092	.1867942	.3480456	.5189644	.6707413	.7891006
7	.0000548	.0032391	.0257293	.0904394	.0404114	.2519519	.5110296	.6552727
8	.0000061	.0007123	.0084001	.0308207	.1078859	.2185314	.3680440	.5056514
9	.0000006	.0001386	.0024375	.0148913	.0511336	.1223684	.2292693	.3609020
10	.0000001	.0000241	.0006344	.0051452	.0219276	.0623518	.1344960	.2378471
11		.0000038	.0001493	.0016114	.0085544	.0280234	.0724340	.1447410
12		.0000005	.0000320	.0004603	.0030516	.0123914	.0324139	.0814464
13		.0000001	.0000063	.0001206	.0010000	.0048717	.0164427	.0484605
14			.0000011	.0000291	.0001304	.0017703	.0069730	.0205534
15			.0000002	.0000065	.0000847	.0005966	.0027470	.0092627
16				.0000013	.0000280	.0001871	.0010888	.0038946
17				.0000003	.0000053	.0000547	.0003456	.0015315
18					.0000012	.0000150	.0001110	.0005645
19					.0000003	.0000038	.0000334	.0001954
20					.0000001	.0000009	.0000095	.0000637
21						.0000003	.0000025	.0000195
22							.0000006	.0000057
23							.0000002	.0000016
24								.0000004
25								.0000001
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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 96

	.17	.18	.19	.20	.21	.22	.23	.24
26	.0084496	.0179581	.0334643	.0577632	.0930540	.1408400	.2014689	.2738594
27	.0044896	.0097091	.0192110	.0350943	.0594307	.0940246	.1423443	.2027798
28	.0021744	.0050145	.0105443	.0204016	.0366099	.0613491	.0965931	.1430765
29	.0010550	.0024750	.0053341	.0113499	.0215246	.0380135	.0629014	.0980714
30	.0004446	.0011679	.0027783	.0060411	.0121216	.0225785	.0393040	.0643035
31	.0001879	.0005271	.0013347	.0030811	.0065396	.0128564	.0235620	.0408864
32	.0000760	.0002276	.0006130	.0015043	.0033804	.0070183	.0135509	.0244742
33	.0000294	.0000941	.0002703	.0007035	.0016746	.0036736	.0074769	.0148033
34	.0000109	.0000372	.0001140	.0003153	.0007952	.0018440	.0039588	.0079139
35	.0000039	.0000141	.0000461	.0001354	.0003620	.0008678	.0020107	.0042322
36	.0000013	.0000051	.0000178	.0000558	.0001561	.0004100	.0009802	.0021738
37	.0000004	.0000018	.0000066	.0000220	.0000652	.0001817	.0004586	.0010714
38	.0000001	.0000006	.0000024	.0000083	.0000268	.0000773	.0002060	.0005078
39		.0000003	.0000003	.0000010	.0000033	.0000103	.0000315	.0000808
40		.0000001	.0000001	.0000001	.0000003	.0000012	.0000036	.0000107
41			.0000001	.0000004	.0000013	.0000047	.0000146	.0000422
42				.0000001	.0000005	.0000017	.0000054	.0000170
43					.0000002	.0000006	.0000020	.0000066
44						.0000001	.0000002	.0000009
45							.0000001	.0000001
46							.0000001	.0000001
47								.0000001
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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 96

X	.41	.42	.43	.44	.45	.46	.47	.48
41	.4042864	.4429619	.5619636	.6382837	.7092454	.7727488	.8275263	.8729866
42	.1267937	.4016749	.4800069	.5584212	.6351277	.7062426	.7700554	.8251967
43	.2562749	.3245927	.3990429	.4770613	.5557159	.6320380	.7033184	.7674888
44	.1947142	.2544947	.3223402	.3963879	.4741215	.5526438	.6289924	.7004634
45	.1432212	.1933516	.2526411	.3200363	.3937072	.4711841	.5496010	.6260053
46	.1018555	.1421842	.1918819	.2507139	.3176791	.3909982	.4682458	.5465836
47	.0699854	.1011118	.1410639	.1903259	.2487129	.3152671	.3882582	.4653024
48	.0464247	.0694681	.1002803	.1398496	.1886843	.2466376	.3137965	.3854845
49	.0297109	.0460764	.0688731	.0993615	.1385468	.1869578	.2444873	.3108715
50	.0183332	.0294832	.0456633	.0682021	.0983624	.1371564	.1851457	.2422610
51	.0109012	.0181844	.0292047	.0451872	.0674569	.0972787	.1356794	.1832488
52	.0062428	.0108113	.0180059	.0288769	.0446496	.0666391	.0961138	.1341168
53	.0034414	.0061881	.0106949	.0177868	.0285011	.0440123	.0657504	.0948688
54	.0018253	.0034092	.0061161	.0105528	.0175324	.0280789	.0433967	.0647932
55	.0009310	.0018066	.0033656	.0060268	.0103860	.0172438	.0276117	.0426846
56	.0004564	.0009204	.0017811	.0033112	.0059210	.0101954	.0169823	.0271010
57	.0002150	.0004506	.0009059	.0017490	.0032464	.0057996	.0099821	.0165693
58	.0000972	.0002119	.0004426	.0008877	.0017107	.0031718	.0056632	.0097471
59	.0000422	.0000956	.0002076	.0004326	.0008659	.0016665	.0030878	.0055124
60	.0000174	.0000414	.0000934	.0002023	.0004207	.0008407	.0016169	.0029932
61	.0000070	.0000172	.0000403	.0000907	.0001960	.0004069	.0008125	.0015621
62	.0000027	.0000068	.0000167	.0000390	.0000874	.0001888	.0003915	.0007815
63	.0000010	.0000026	.0000064	.0000141	.0000375	.0000839	.0001808	.0003747
64	.0000003	.0000009	.0000025	.0000063	.0000153	.0000357	.0000799	.0001720
65	.0000001	.0000003	.0000009	.0000024	.0000060	.0000145	.0000338	.0000756
66		.0000001	.0000003	.0000009	.0000022	.0000057	.0000137	.0000317
67			.0000001	.0000003	.0000008	.0000021	.0000053	.0000127
68				.0000001	.0000003	.0000007	.0000019	.0000049
69					.0000001	.0000003	.0000007	.0000018
70						.0000001	.0000002	.0000006
71							.0000001	.0000002
72								.0000001

X	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	1.0000000	1.0000000
8	1.0000000	1.0000000
9	1.0000000	1.0000000
10	1.0000000	1.0000000
11	1.0000000	1.0000000
12	1.0000000	1.0000000
13	1.0000000	1.0000000
14	1.0000000	1.0000000
15	1.0000000	1.0000000
16	1.0000000	1.0000000
17	1.0000000	1.0000000
18	1.0000000	1.0000000
19	1.0000000	1.0000000
20	1.0000000	1.0000000
21	1.0000000	1.0000000
22	1.0000000	1.0000000
23	.9999999	1.0000000
24	.9999998	.9999999
25	.9999997	.9999995
26	.9999994	.9999986
27	.9999983	.9999960
28	.9999975	.9999933
29	.9999958	.9999872
30	.9999934	.9999739
31	.9999897	.9999672
32	.9999853	.9999626
33	.9999804	.9999578
34	.9999751	.9999527
35	.9999693	.9999473
36	.9999631	.9999420
37	.9999565	.9999363
38	.9999495	.9999303
39	.9999421	.9999240
40	.9999348	.9999176
41	.9999266	.9999103
42	.9999176	.9999021
43	.9999079	.9998928
44	.9998975	.9998824
45	.9998865	.9998714
46	.9998750	.9998600
47	.9998630	.9998480
48	.9998505	.9998355
49	.9998375	.9998225
50	.9998240	.9998080
51	.9998100	.9997940
52	.9997955	.9997795
53	.9997805	.9997645
54	.9997650	.9997490
55	.9997490	.9997330
56	.9997325	.9997170
57	.9997155	.9997000
58	.9996980	.9996825
59	.9996800	.9996645
60	.9996615	.9996455
61	.9996425	.9996265
62	.9996230	.9996060
63	.9996030	.9995860
64	.9995825	.9995655
65	.9995615	.9995445
66	.9995400	.9995230
67	.9995180	.9995010
68	.9994955	.9994785
69	.9994725	.9994555
70	.9994490	.9994360
71	.9994250	.9994120
72	.9994005	.9993875

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 96

	.49	.50
61	.0000045	.0001730
62	.0013098	.0027865
63	.0007479	.0014193
64	.0001546	.0007129
65	.0001637	.0001378
66	.0000739	.0001588
67	.0000295	.0000641
68	.0000117	.0000273
69	.0000044	.0000107
70	.0000016	.0000040
71	.0000008	.0000014
72	.0000000	.0000003
73	.0000001	.0000002

$$P(r, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

$n \backslash p$	.01	.02	.03	.04	.05	.06	.07	.08
1	.99	.98	.97	.96	.95	.94	.93	.92
2	.9801	.9604	.9409	.9216	.9025	.8836	.8649	.8464
3	.9703	.9408	.9127	.8864	.8619	.8394	.8189	.7996
4	.9609	.9216	.8836	.8464	.8109	.7771	.7450	.7146
5	.9518	.9025	.8649	.8279	.7925	.7587	.7266	.6964
6	.9430	.8936	.8564	.8204	.7859	.7529	.7216	.6921
7	.9345	.8851	.8489	.8139	.7804	.7484	.7171	.6876
8	.9262	.8768	.8416	.8076	.7754	.7441	.7136	.6841
9	.9181	.8687	.8344	.8014	.7701	.7396	.7099	.6814
10	.9101	.8607	.8274	.7954	.7650	.7354	.7066	.6786
11	.9022	.8528	.8204	.7894	.7600	.7314	.7036	.6766
12	.8944	.8450	.8136	.7836	.7554	.7284	.7021	.6766
13	.8867	.8373	.8069	.7779	.7509	.7249	.6996	.6751
14	.8791	.8297	.7994	.7714	.7454	.7204	.6959	.6724
15	.8716	.8222	.7929	.7659	.7409	.7169	.6934	.6709
16	.8642	.8148	.7855	.7595	.7355	.7125	.6899	.6684
17	.8568	.8074	.7781	.7531	.7301	.7081	.6864	.6659
18	.8494	.8000	.7707	.7457	.7227	.7017	.6809	.6604
19	.8420	.7926	.7633	.7383	.7153	.6953	.6754	.6559
20	.8346	.7852	.7559	.7309	.7079	.6889	.6699	.6504
21	.8272	.7778	.7485	.7235	.7005	.6825	.6644	.6459
22	.8198	.7704	.7411	.7161	.6931	.6761	.6589	.6414
23	.8124	.7630	.7337	.7087	.6857	.6687	.6524	.6359
24	.8050	.7556	.7263	.7013	.6783	.6623	.6469	.6314
25	.7976	.7482	.7189	.6939	.6709	.6549	.6399	.6254

$n \backslash p$	.09	.10	.11	.12	.13	.14	.15	.16
1	.91	.90	.89	.88	.87	.86	.85	.84
2	.8281	.8164	.8049	.7936	.7825	.7716	.7609	.7504
3	.8164	.8049	.7936	.7825	.7716	.7609	.7504	.7401
4	.8049	.7936	.7825	.7716	.7609	.7504	.7401	.7300
5	.7936	.7825	.7716	.7609	.7504	.7401	.7300	.7200
6	.7825	.7716	.7609	.7504	.7401	.7300	.7200	.7101
7	.7716	.7609	.7504	.7401	.7300	.7200	.7101	.7003
8	.7609	.7504	.7401	.7300	.7200	.7101	.7003	.6906
9	.7504	.7401	.7300	.7200	.7101	.7003	.6906	.6810
10	.7401	.7300	.7200	.7101	.7003	.6906	.6810	.6715
11	.7300	.7200	.7101	.7003	.6906	.6810	.6715	.6621
12	.7200	.7101	.7003	.6906	.6810	.6715	.6621	.6528
13	.7101	.7003	.6906	.6810	.6715	.6621	.6528	.6436
14	.7003	.6906	.6810	.6715	.6621	.6528	.6436	.6345
15	.6906	.6810	.6715	.6621	.6528	.6436	.6345	.6255
16	.6810	.6715	.6621	.6528	.6436	.6345	.6255	.6166
17	.6715	.6621	.6528	.6436	.6345	.6255	.6166	.6078
18	.6621	.6528	.6436	.6345	.6255	.6166	.6078	.5991
19	.6528	.6436	.6345	.6255	.6166	.6078	.5991	.5905
20	.6436	.6345	.6255	.6166	.6078	.5991	.5905	.5820
21	.6345	.6255	.6166	.6078	.5991	.5905	.5820	.5736
22	.6255	.6166	.6078	.5991	.5905	.5820	.5736	.5653
23	.6166	.6078	.5991	.5905	.5820	.5736	.5653	.5571
24	.6078	.5991	.5905	.5820	.5736	.5653	.5571	.5490
25	.5991	.5905	.5820	.5736	.5653	.5571	.5490	.5410
26	.5905	.5820	.5736	.5653	.5571	.5490	.5410	.5331
27	.5820	.5736	.5653	.5571	.5490	.5410	.5331	.5253
28	.5736	.5653	.5571	.5490	.5410	.5331	.5253	.5176
29	.5653	.5571	.5490	.5410	.5331	.5253	.5176	.5100
30	.5571	.5490	.5410	.5331	.5253	.5176	.5100	.5025
31	.5490	.5410	.5331	.5253	.5176	.5100	.5025	.4951
32	.5410	.5331	.5253	.5176	.5100	.5025	.4951	.4878
33	.5331	.5253	.5176	.5100	.5025	.4951	.4878	.4806
34	.5253	.5176	.5100	.5025	.4951	.4878	.4806	.4735
35	.5176	.5100	.5025	.4951	.4878	.4806	.4735	.4665
36	.5100	.5025	.4951	.4878	.4806	.4735	.4665	.4596
37	.5025	.4951	.4878	.4806	.4735	.4665	.4596	.4528

$n \backslash p$	.17	.18	.19	.20	.21	.22	.23	.24
1	.83	.82	.81	.80	.79	.78	.77	.76
2	.6881	.6800	.6720	.6641	.6563	.6486	.6410	.6335
3	.6800	.6720	.6641	.6563	.6486	.6410	.6335	.6261
4	.6720	.6641	.6563	.6486	.6410	.6335	.6261	.6188
5	.6641	.6563	.6486	.6410	.6335	.6261	.6188	.6116
6	.6563	.6486	.6410	.6335	.6261	.6188	.6116	.6045
7	.6486	.6410	.6335	.6261	.6188	.6116	.6045	.5975
8	.6410	.6335	.6261	.6188	.6116	.6045	.5975	.5906
9	.6335	.6261	.6188	.6116	.6045	.5975	.5906	.5838
10	.6261	.6188	.6116	.6045	.5975	.5906	.5838	.5771
11	.6188	.6116	.6045	.5975	.5906	.5838	.5771	.5705
12	.6116	.6045	.5975	.5906	.5838	.5771	.5705	.5640
13	.6045	.5975	.5906	.5838	.5771	.5705	.5640	.5576
14	.5975	.5906	.5838	.5771	.5705	.5640	.5576	.5513
15	.5906	.5838	.5771	.5705	.5640	.5576	.5513	.5451
16	.5838	.5771	.5705	.5640	.5576	.5513	.5451	.5390
17	.5771	.5705	.5640	.5576	.5513	.5451	.5390	.5330
18	.5705	.5640	.5576	.5513	.5451	.5390	.5330	.5271
19	.5640	.5576	.5513	.5451	.5390	.5330	.5271	.5213
20	.5576	.5513	.5451	.5390	.5330	.5271	.5213	.5156
21	.5513	.5451	.5390	.5330	.5271	.5213	.5156	.5100
22	.5451	.5390	.5330	.5271	.5213	.5156	.5100	.5045
23	.5390	.5330	.5271	.5213	.5156	.5100	.5045	.4991
24	.5330	.5271	.5213	.5156	.5100	.5045	.4991	.4938
25	.5271	.5213	.5156	.5100	.5045	.4991	.4938	.4886
26	.5213	.5156	.5100	.5045	.4991	.4938	.4886	.4835
27	.5156	.5100	.5045	.4991	.4938	.4886	.4835	.4785
28	.5100	.5045	.4991	.4938	.4886	.4835	.4785	.4736
29	.5045	.4991	.4938	.4886	.4835	.4785	.4736	.4688
30	.4991	.4938	.4886	.4835	.4785	.4736	.4688	.4641
31	.4938	.4886	.4835	.4785	.4736	.4688	.4641	.4595
32	.4886	.4835	.4785	.4736	.4688	.4641	.4595	.4550
33	.4835	.4785	.4736	.4688	.4641	.4595	.4550	.4506
34	.4785	.4736	.4688	.4641	.4595	.4550	.4506	.4463
35	.4736	.4688	.4641	.4595	.4550	.4506	.4463	.4421
36	.4688	.4641	.4595	.4550	.4506	.4463	.4421	.4380
37	.4641	.4595	.4550	.4506	.4463	.4421	.4380	.4340

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$$H(n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 97

x	.17	.18	.19	.20	.21	.22	.23	.24
28	.0025640	.0038544	.0121911	.0233402	.0414440	.0687358	.1071205	.1577413
29	.0012045	.0029121	.0064860	.0131803	.0246225	.0431466	.0706307	.1090168
30	.0005400	.0014032	.0033019	.0071050	.0140264	.0259740	.0447314	.0724071
31	.0002315	.0006425	.0016090	.0036737	.0077119	.0149953	.0271826	.0462023
32	.0000950	.0002815	.0007507	.0018196	.0040432	.0083027	.0158535	.0283172
33	.0000373	.0001181	.0003355	.0008637	.0020328	.0044094	.0088739	.0166683
34	.0000140	.0000475	.0001437	.0003929	.0009749	.0022465	.0047675	.0094226
35	.0000051	.0000163	.0000509	.0001714	.0004530	.0010981	.0024586	.0051155
36	.0000017	.0000068	.0000232	.0000717	.0002009	.0005151	.0012172	.0026673
37	.0000006	.0000024	.0000088	.0000258	.0000855	.0002319	.0005786	.0013358
38	.0000002	.0000008	.0000032	.0000111	.0000349	.0001003	.0002641	.0006426
39	.0000001	.0000003	.0000011	.0000041	.0000137	.0000416	.0001150	.0002970
40		.0000001	.0000004	.0000015	.0000052	.0000166	.0000487	.0001319
41			.0000001	.0000005	.0000019	.0000063	.0000197	.0000563
42				.0000002	.0000006	.0000023	.0000077	.0000231
43				.0000001	.0000002	.0000008	.0000029	.0000091
44					.0000001	.0000003	.0000010	.0000034
45						.0000001	.0000004	.0000013
46							.0000001	.0000004
47								.0000001
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	.13	.34	.35	.36	.37	.38	.39	.40
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	.99999999	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	.99999997	.99999994	.99999996	.99999999	.99999999	1.00000000	1.00000000	1.00000000
14	.99999990	.99999961	.99999985	.99999994	.99999998	.99999999	1.00000000	1.00000000
15	.99999974	.99999982	.99999951	.99999980	.99999992	.99999997	.99999994	1.00000000
16	.99999214	.99994651	.99999449	.99999337	.99999744	.99999900	.99999966	.99999935
17	.99997830	.99997300	.99997910	.99997922	.99997922	.99997930	.99997937	.99997937
18	.99994929	.99997340	.99998133	.99997767	.99997767	.99997767	.99997767	.99997767
19	.999981347	.99994106	.99997111	.99996621	.99993368	.99997310	.99994878	.99999499
20	.99748694	.99867552	.99932333	.99966651	.99981394	.99992544	.99996664	.99999854
21	.99489978	.9971975	.99850906	.99923165	.99961444	.99988145	.99999131	.99999606
22	.99022211	.99440653	.99690113	.99841375	.99913371	.9995653	.9997882	.99990000
23	.98592604	.99263083	.99562965	.99796111	.99870566	.99929829	.99979257	.99997066
24	.96948846	.9810957	.99085565	.9934111	.99627056	.99798829	.99929829	.99997066
25	.95008836	.96788425	.97799414	.98718857	.99221644	.99598899	.99788024	.99883343
26	.9221752	.9479065	.9662337	.97878071	.9871212	.9924230	.9956847	.9976212
27	.8841094	.9194664	.9457938	.96446653	.9776924	.9863690	.9919333	.9950316
28	.8348073	.8800978	.9168520	.9437473	.9631403	.9766117	.9856317	.9914555
29	.7740992	.8313222	.8790917	.91794314	.9471404	.9661585	.9756563	.9825527
30	.7029555	.7705057	.8279772	.8749622	.9121041	.9398585	.9602206	.9745327
31	.6215294	.6994916	.7670558	.8247665	.8721484	.9095696	.9380185	.9588403
32	.5389779	.6204251	.69641573	.76337423	.8216848	.8694469	.9073270	.9362493
33	.4510878	.5364169	.6174190	.6929446	.7605581	.8187274	.8668557	.9051758
34	.3627606	.4511744	.5339087	.6154041	.6898463	.7574971	.8158996	.8643761
35	.2925054	.3805151	.4492640	.5131494	.5716738	.6268556	.6754534	.7183177
36	.22801135	.2918673	.3672253	.4471565	.5290473	.6089221	.6839665	.7517718
37	.1659147	.2238650	.2911459	.3658915	.4450434	.5266590	.6062437	.6811732
38	.1187373	.1661104	.2233077	.2903437	.3645514	.4435353	.5243397	.6036333
39	.0820478	.1191330	.1661865	.2232458	.2929431	.3630930	.4416181	.5220123
40	.0547097	.0825219	.1194145	.1661473	.2227817	.2895058	.3612681	.4396939
41	.0351854	.0551746	.0828909	.1195766	.1659966	.2222195	.2874734	.3601191
42	.0218162	.0358849	.0555519	.0831578	.1196321	.1657379	.2215614	.2863670
43	.0130365	.0221360	.0359239	.0558437	.0833254	.1195809	.1653741	.2208006
44	.0075058	.0132717	.0224056	.0361918	.0565619	.0833964		

[illegible]

AMCP 706-109

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 97

p	.41	.42	.43	.44	.45	.46	.47	.48
37	.7469976	.8080548	.8575443	.8974707	.9284897	.9517003	.9684290	.9800422
38	.7484708	.7463763	.8056577	.8534696	.8925766	.9227159	.9507115	.9677294
39	.6010864	.6758545	.7438536	.8033629	.8534927	.8941504	.9259034	.9497834
40	.5197335	.5985986	.6733200	.7414265	.8011676	.8516122	.8926219	.9247232
41	.4377602	.5174799	.5961660	.6708633	.7390910	.7990696	.8498269	.8911809
42	.3585656	.4358154	.5152483	.5937847	.6684807	.7368444	.7970668	.8481359
43	.2853876	.3569670	.4338574	.5130356	.5914512	.6661689	.7346830	.7951574
44	.2199659	.2839357	.3553224	.4318842	.5108190	.5891621	.6639247	.7326068
45	.1643415	.2190317	.2826117	.3536310	.4298936	.5086555	.5869150	.6617453
46	.1188154	.1636769	.2180084	.2812158	.3518917	.4278837	.5064826	.5847061
47	.0830521	.1183639	.1629156	.2168966	.2797477	.3501034	.4258522	.5043174
48	.0560845	.0827584	.1178173	.1620592	.2156972	.2782071	.3482646	.4237971
49	.0365635	.0559009	.0823782	.1171774	.1611087	.2144104	.2765935	.3463738
50	.0229981	.0364523	.0556435	.0819131	.1164454	.1600449	.2130362	.2749061
51	.0139483	.0229322	.0362819	.0553137	.0813644	.1156235	.1589286	.2115747
52	.0081527	.0139097	.0228214	.0360534	.0549129	.0807333	.1147096	.1577000
53	.0045900	.0081300	.0138386	.0226664	.0357680	.0544222	.0800212	.1137077
54	.0024879	.0045764	.0080850	.0137358	.0224683	.0354267	.0539630	.0792289
55	.0012976	.0024797	.0045483	.0080183	.0136019	.0222279	.0350307	.0532962
56	.0006510	.0012926	.0024624	.0045061	.0079303	.0134377	.0219463	.0345811
57	.0003139	.0006479	.0012823	.0024364	.0044500	.0078217	.0132440	.0216245
58	.0001455	.0003121	.0006419	.0012667	.0024018	.0043805	.0076931	.0130217
59	.0000647	.0001444	.0003087	.0006328	.0012461	.0023589	.0042982	.0075452
60	.0000277	.0000642	.0001425	.0003037	.0006210	.0012206	.0023082	.0042016
61	.0000113	.0000273	.0000632	.0001398	.0002971	.0006065	.0011905	.0022500
62	.0000045	.0000112	.0000268	.0000618	.0001364	.0002891	.0005894	.0011563
63	.0000017	.0000044	.0000109	.0000262	.0000600	.0001322	.0002790	.0005599
64	.0000006	.0000016	.0000043	.0000106	.0000253	.0000579	.0001273	.0002693
65	.0000002	.0000006	.0000016	.0000041	.0000102	.0000243	.0000555	.0001219
66	.0000001	.0000002	.0000006	.0000015	.0000039	.0000097	.0000231	.0000526
67		.0000001	.0000002	.0000005	.0000015	.0000037	.0000092	.0000218
68			.0000001	.0000002	.0000005	.0000014	.0000035	.0000088
69				.0000001	.0000002	.0000005	.0000013	.0000083
70					.0000001	.0000002	.0000004	.0000078
71						.0000001	.0000001	.0000074
72							.0000001	.0000070

p	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	1.0000000	1.0000000
8	1.0000000	1.0000000
9	1.0000000	1.0000000
10	1.0000000	1.0000000
11	1.0000000	1.0000000
12	1.0000000	1.0000000
13	1.0000000	1.0000000
14	1.0000000	1.0000000
15	1.0000000	1.0000000
16	1.0000000	1.0000000
17	1.0000000	1.0000000
18	1.0000000	1.0000000
19	1.0000000	1.0000000
20	1.0000000	1.0000000
21	1.0000000	1.0000000
22	1.0000000	1.0000000
23	.9999999	1.0000000
24	.9999997	.9999999
25	.9999991	.9999997
26	.9999975	.9999990
27	.9999953	.9999973
28	.9999925	.9999926
29	.9999896	.9999810
30	.9999873	.9999533
31	.9999783	.9998905
32	.99995004	.9997549
33	.9998966	.9994752
34	.99979650	.9989242
35	.99961481	.9978871
36	.99930059	.9960203
37	.99878066	.9928052
38	.99795710	.9875046
39	.99670774	.9791353
40	.99489179	.9664741
41	.99236193	.9481153
42	.9898273	.9225921
43	.9865382	.8885612
44	.9833398	.8450332
45	.97966118	.7916126
46	.9696281	.7386949
47	.9582531	.6575706
48	.94021574	.5803932
49	.9217161	.5000000
50	.9444293	.4196068
51	.8731437	.3424294
52	.8100253	.2713651
53	.7563794	.2081874
54	.7136173	.1549668
55	.6783576	.1114188
56	.6526231	.0774079
57	.6340791	.0518847

$$P(c, n, p) = \sum_{r=0}^c \binom{n}{r} p^r (1-p)^{n-r}$$

n = 97

r	.49	.50
58	.0212636	.0335259
59	.0127719	.0208647
60	.0073788	.0124954
61	.0040972	.0071948
62	.0021847	.0039797
63	.0011178	.0021129
64	.0005483	.0010758
65	.0002577	.0005248
66	.0001150	.0002451
67	.0000498	.0001095
68	.0000205	.0000467
69	.0000080	.0000190
70	.0000030	.0000074
71	.0000011	.0000027
72	.0000004	.0000010
73	.0000001	.0000003
74		.0000001

n = 93

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 90

λ	.17	.18	.19	.20	.21	.22	.23	.24
28	.0010207	.0008197	.0014395	.0265977	.0467401	.0767197	.1183532	.1725535
29	.0001463	.0013191	.0071900	.0181963	.0383108	.0677262	.1070387	.1570107
30	.0000530	.0016784	.0039069	.0083160	.0165216	.0297580	.0506928	.0811934
31	.0000240	.0007704	.0019307	.0043529	.0090526	.0174106	.0312189	.0524914
32	.0000118	.0003465	.0009138	.0021904	.0048142	.0097751	.0184592	.0326096
33	.0000047	.0001475	.0004144	.0010548	.0024552	.0052659	.0104792	.0194640
34	.0000018	.0000502	.0001401	.0004871	.0012010	.0027223	.0057120	.0111616
35	.0000006	.0000235	.0000751	.0002157	.0005637	.0013508	.0029886	.0061452
36	.0000003	.0000088	.0000300	.0000916	.0002519	.0006434	.0015027	.0032549
37	.0000000	.0000032	.0000115	.0000374	.0001097	.0002942	.0007255	.0016554
38	.0000000	.0000011	.0000042	.0000146	.0000455	.0001392	.0003764	.0009050
39	.0000000	.0000004	.0000018	.0000065	.0000201	.0000565	.0001478	.0003799
40	.0000000	.0000000	.0000005	.0000020	.0000069	.0000221	.0000642	.0001715
41			.0000002	.0000007	.0000026	.0000086	.0000264	.0000744
42			.0000001	.0000002	.0000009	.0000032	.0000104	.0000310
43				.0000001	.0000003	.0000012	.0000040	.0000124
44					.0000001	.0000004	.0000014	.0000048
45						.0000001	.0000005	.0000018
46							.0000002	.0000006
47							.0000001	.0000002
48								.0000001

λ	.25	.26	.27	.28	.29	.30	.31	.32
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
9	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000
10	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000
11	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
12	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
13	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
14	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
15	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
16	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
17	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
18	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
19	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
20	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
21	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
22	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
23	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
24	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
25	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
26	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
27	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
28	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
29	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
30	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
31	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
32	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
33	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
34	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
35	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
36	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
37	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
38	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
39	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
40	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
41	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
42	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
43	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
44	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
45	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
46	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
47	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
48	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
49	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
50	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
51	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
52	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
53	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
54	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
55	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
56	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
57	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999

λ	.33	.34	.35	.36	.37	.38	.39	.40
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000

n = 98

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$$P(c, n, p) = \sum_{r=0}^c \binom{n}{r} p^r (1-p)^{n-r}$$

	.41	.42	.43	.44	.45	.46	.47	.48
40	.5530882	.6310461	.7036495	.7686785	.8247139	.8711798	.9082642	.9267520
41	.4713693	.5515498	.6293422	.7019111	.7670255	.8232392	.8699406	.9072812
42	.3910354	.4701145	.5500429	.6272993	.7002554	.7684680	.8218441	.8687975
43	.3158726	.3900033	.4688285	.5486552	.6261145	.6986796	.7640038	.8205871
44	.2467068	.3146088	.3890985	.4675908	.5471145	.6245851	.6971015	.7626311
45	.1871475	.2462914	.3138773	.3880624	.4663190	.5456887	.6231095	.6957588
46	.1374811	.1869259	.2457878	.3130785	.3869926	.4650387	.5442858	.6216840
47	.0977151	.1372953	.1865055	.2431970	.3123185	.3858821	.4637485	.5429040
48	.0671419	.0977127	.1372096	.1861877	.2445199	.3113794	.3847308	.4624489
49	.0445571	.0671811	.0976171	.1369254	.1856735	.2437569	.3108789	.3835370
50	.0288359	.0446207	.0671394	.0974294	.1365439	.1850638	.2424082	.3092106
51	.0176587	.02886107	.0446074	.0670174	.0971508	.1360660	.1841592	.2419737
52	.0105289	.0176991	.02885094	.0445280	.0668161	.0967623	.1354925	.1838598
53	.0060507	.0105374	.0177012	.0288567	.0443832	.0665361	.0963248	.1348440
54	.0033498	.0060689	.0105590	.0176653	.0284532	.0441738	.0661785	.0957787
55	.0017857	.0033603	.0060691	.0105340	.0175910	.0282894	.0439007	.0657439
56	.0009161	.0017912	.0033594	.0060514	.0104825	.0174812	.0280960	.0435644
57	.0004521	.0009187	.0017897	.0033470	.0060161	.0104050	.0173341	.0278437
58	.0002146	.0004533	.0009172	.0017814	.0033235	.0060435	.0103020	.0171511
59	.0000978	.0002149	.0004520	.0009117	.0017661	.0033289	.0060838	.0101739
60	.0000429	.0000979	.0002140	.0004485	.0009023	.0017442	.0033245	.0060805
61	.0000180	.0000428	.0000973	.0002119	.0004429	.0009890	.0017158	.0033187
62	.0000073	.0000180	.0000425	.0000961	.0002087	.0004351	.0009819	.0016813
63	.0000028	.0000072	.0000178	.0000418	.0000944	.0002044	.0004283	.0009813
64	.0000010	.0000028	.0000071	.0000174	.0000409	.0000921	.0001990	.0004156
65	.0000004	.0000010	.0000027	.0000070	.0000170	.0000397	.0000892	.0001926
66	.0000001	.0000004	.0000010	.0000027	.0000068	.0000164	.0000383	.0000859
67		.0000001	.0000004	.0000010	.0000026	.0000065	.0000157	.0000367
68			.0000001	.0000003	.0000009	.0000025	.0000062	.0000150
69				.0000001	.0000003	.0000009	.0000023	.0000058
70					.0000001	.0000003	.0000008	.0000052
71						.0000001	.0000003	.0000008
72							.0000001	.0000003
73								.0000001

	.49	.50
74	1.00000000	1.00000000
75	1.00000000	1.00000000
76	1.00000000	1.00000000
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140	1.00000000	1.00000000
141	1.00000000	1.00000000
142	1.00000000	1.00000000
143	1.00000000	1.00000000
144	1.00000000	1.00000000
145	1.00000000	1.00000000
146	1.00000000	1.00000000
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148	1.00000000	1.00000000
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180	1.00000000	1.00000000
181	1.00000000	1.00000000
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189	1.00000000	1.00000000
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194	1.00000000	1.00000000
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197	1.00000000	1.00000000
198	1.00000000	1.00000000
199	1.00000000	1.00000000
200	1.00000000	1.00000000

$$P(x, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 90

x	.40	.50
60	.0107214	.0166800
61	.0057053	.0098431
62	.0031218	.0055873
63	.0016406	.0030463
64	.0008274	.0015943
65	.0004001	.0008003
66	.0001834	.0003849
67	.0000822	.0001773
68	.0000349	.0000781
69	.0000141	.0000329
70	.0000055	.0000138
71	.0000020	.0000051
72	.0000007	.0000018
73	.0000003	.0000006
74	.0000001	.0000002
75		.0000001

$$P(x, y, z) = \sum_{r=0}^{\infty} \frac{(x)^r}{r!} e^{-x} (1 - e^{-x})^{r-1} e^{-x}$$

n = 3

	.01	.02	.03	.04	.05	.06	.07	.08
1	.6303704	.8646739	.9509768	.9844866	.9937672	.9978140	.9993418	.9997400
2	.8605407	.9512600	.9800748	.9933771	.9961295	.9984000	.9993591	.9997516
3	.9775432	.9817846	.9734007	.9619374	.9475497	.9307944	.9127537	.8936643
4	.9917764	.9743301	.9439354	.9054899	.8550356	.8016268	.7453374	.6861489
5	.9932874	.9490631	.8707998	.7631604	.6350178	.5002879	.3604427	.2301064
6	.9905067	.8147983	.6776005	.5053112	.3750000	.2482676	.1394038	.0637268
7	.9900667	.6634429	.4397853	.2628707	.1585642	.0937063	.0449040	.0207670
8	.9900076	.4000875	.0100312	.0452304	.1207708	.0330215	.0044058	.0012466
9	.9900030	.0001754	.0010053	.0178986	.0592405	.1400996	.0266728	.0057303
10	.9900001	.0000315	.0000881	.0063839	.0265167	.0735458	.0148953	.0027786
11		.0000051	.0001966	.0020654	.0106806	.0353132	.0859460	.0176564
12		.0000000	.0000435	.0006101	.0039370	.0155677	.0439612	.0972095
13		.0000001	.0000080	.0001653	.0013342	.0063853	.0207858	.0532867
14			.0000016	.0000413	.0004174	.0023773	.0091109	.0261443
15			.0000003	.0000095	.0001210	.0008292	.0037131	.0121000
16				.0000020	.0000386	.0002693	.0014104	.0052921
17				.0000004	.0000062	.0000817	.0005011	.0021570
18				.0000001	.0000019	.0000232	.0001667	.0008242
19					.0000004	.0000062	.0000521	.0002859
20					.0000001	.0000015	.0000153	.0001000
21						.0000004	.0000042	.0000314
22						.0000001	.0000011	.0000096
23							.0000003	.0000027
24							.0000001	.0000007
25								.0000000
26								
27								
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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 99

	.17	.18	.19	.20	.21	.22	.23	.24
28	.0035343	.0079065	.0161041	.0301944	.0525129	.0853152	.1302915	.1880912
29	.0017056	.0040640	.0087992	.0174766	.03381019	.0549338	.0880811	.1313529
30	.0007661	.0019889	.0046029	.0096921	.0188103	.0339373	.0572124	.0906774
31	.0003467	.0009418	.0023061	.0051511	.0105791	.0201257	.0358979	.0593799
32	.0001464	.0004244	.0011070	.0025843	.0057042	.0114549	.0213939	.0373818
33	.0000599	.0001834	.0005093	.0012820	.0029505	.0062579	.0113146	.0206190
34	.0000289	.0000879	.0002446	.0006006	.0014644	.0032819	.0068084	.0131341
35	.0000135	.0000430	.0001250	.0003270	.0007753	.0016898	.0036158	.0073528
36	.0000063	.0000215	.0000636	.0001664	.0004189	.0009790	.0021447	.0043995
37	.0000030	.0000104	.0000310	.0000782	.0001940	.0004711	.0010942	.0022033
38	.0000015	.0000052	.0000156	.0000398	.0000990	.0002465	.0006085	.0012612
39	.0000007	.0000026	.0000079	.0000200	.0000503	.0001270	.0003192	.0007829
40	.0000003	.0000013	.0000039	.0000100	.0000253	.0000639	.0001628	.0004081
41			.0000018	.0000047	.0000119	.0000301	.0000751	.0001877
42			.0000009	.0000023	.0000058	.0000146	.0000361	.0000914
43				.0000011	.0000028	.0000070	.0000176	.0000439
44					.0000033	.0000082	.0000206	.0000516
45						.0000206	.0000516	.0001285
46							.0000516	.0001285
47								.0001285
48								.0001285

	.25	.26	.27	.28	.29	.30	.31	.32
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
9	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000
10	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000
11	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
12	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
13	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
14	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
15	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
16	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
17	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
18	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
19	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
20	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
21	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
22	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
23	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
24	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
25	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
26	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
27	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
28	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
29	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
30	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
31	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
32	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
33	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
34	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
35	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
36	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
37	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
38	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
39	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
40	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
41	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
42	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
43	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
44	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
45	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
46	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
47	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
48	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
49	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
50	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
51	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
52	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
53	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
54	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
55	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
56	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
57	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999

	.33	.34	.35	.36	.37	.38	.39	.40
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999

$$P(r, r, t) = \sum_{r=0}^R \binom{R}{r} r^2 (1-p)^{R-r}$$

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$$P(n, n_1, r) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 92

X	.41	.42	.43	.44	.45	.46	.47	.48
38	.7347964	.7294156	.7240408	.7186745	.7133055	.7079346	.7025619	.6971877
39	.6611889	.6558037	.6504184	.6450331	.6396478	.6342625	.6288772	.6234919
40	.5837758	.5783867	.5729976	.5676085	.5622194	.5568303	.5514412	.5460521
41	.5048740	.4994849	.4940958	.4887067	.4833176	.4779285	.4725394	.4671503
42	.4219723	.4165832	.4111941	.4058050	.4004159	.3950268	.3896377	.3842486
43	.3461353	.3407462	.3353571	.3299680	.3245789	.3191898	.3138007	.3084116
44	.2748187	.2694296	.2640405	.2586514	.2532623	.2478732	.2424841	.2370950
45	.2116660	.2062769	.2008878	.1954987	.1901096	.1847205	.1793314	.1739423
46	.1578443	.1524552	.1470661	.1416770	.1362879	.1308988	.1255097	.1201206
47	.1140191	.1086300	.1032409	.0978518	.0924627	.0870736	.0816845	.0762954
48	.0796765	.0742874	.0688983	.0635092	.0581201	.0527310	.0473419	.0419528
49	.0531225	.0477334	.0423443	.0369552	.0315661	.0261770	.0207879	.0153988
50	.0351889	.0297998	.0244107	.0190216	.0136325	.0082434	.0028543	.0000000
51	.0221285	.0167394	.0113503	.0059612	.0005721	.0000000	.0000000	.0000000
52	.0131501	.0077610	.0023719	.0000000	.0000000	.0000000	.0000000	.0000000
53	.0078868	.0024977	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
54	.0044578	.0010687	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
55	.0024869	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
56	.0012786	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
57	.0006484	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
58	.0003100	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
59	.0001457	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
60	.0000654	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
61	.0000283	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
62	.0000117	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
63	.0000046	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
64	.0000018	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
65	.0000006	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
66	.0000002	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
67	.0000001	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
68	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
69	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
70	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
71	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
72	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
73	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
74	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000

X	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	1.0000000	1.0000000
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23	1.0000000	1.0000000
24	.9999999	1.0000000
25	.9999999	.9999999
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37	.9999999	.9999999
38	.9999999	.9999999
39	.9999999	.9999999
40	.9999999	.9999999
41	.9999999	.9999999
42	.9999999	.9999999
43	.9999999	.9999999
44	.9999999	.9999999
45	.9999999	.9999999
46	.9999999	.9999999
47	.9999999	.9999999
48	.9999999	.9999999
49	.9999999	.9999999
50	.9999999	.9999999
51	.9999999	.9999999
52	.9999999	.9999999
53	.9999999	.9999999
54	.9999999	.9999999
55	.9999999	.9999999
56	.9999999	.9999999
57	.9999999	.9999999

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 99

	.49	.50
50	.0351982	.0536758
51	.0281319	.0349503
52	.0134080	.0319376
53	.0078301	.0132626
54	.0043877	.0077162
55	.0023654	.0043168
56	.0012859	.0023803
57	.0006095	.0011973
58	.0002906	.0005926
59	.0001327	.0002813
60	.0000581	.0001277
61	.0000243	.0000558
62	.0000097	.0000230
63	.0000037	.0000091
64	.0000013	.0000035
65	.0000005	.0000013
66	.0000002	.0000004
67		.0000001

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 100

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.6339677	.6673804	.6924475	.711297	.7240755	.7319451	.7392248	.746009
2	.2648380	.2967293	.3053779	.3128567	.3192188	.3244889	.3296771	.3347867
3	.0793732	.1233144	.1802249	.2378574	.2817370	.3148872	.3387275	.3544722
4	.0183740	.0410384	.0727508	.1052444	.1372161	.1683769	.1983558	.2278741
5	.0034323	.0080304	.01621432	.02711359	.04040187	.0566248	.0753248	.0969634
6	.0005345	.0154836	.0400371	.0811251	.1340009	.20593073	.2907753	.3921236
7	.0000711	.0040621	.0132275	.0339223	.0639860	.1033640	.1557198	.2250440
8	.0000082	.0009319	.0106238	.0475121	.1279605	.2516506	.4012208	.5528908
9	.0000008	.0001893	.0032140	.0189919	.0630896	.1462869	.2860341	.4073718
10	.0000001	.0000344	.0008741	.0068445	.0281883	.0778391	.1820196	.2760820
11		.0000056	.0002149	.0022385	.0114784	.0376068	.0907753	.1756670
12		.0000008	.0000481	.0006683	.0042742	.0167534	.0469004	.1058438
13		.0000001	.0000099	.0001831	.0014643	.0068798	.0284078	.0858805
14			.0000019	.0000463	.0004633	.0026141	.0099881	.0382357
15			.0000003	.0000108	.0001359	.0009231	.0040910	.0135978
16			.0000001	.0000023	.0000371	.0003029	.0015780	.0058496
17				.0000005	.0000094	.0000929	.0005448	.0024091
18				.0000001	.0000022	.0000267	.0001908	.0009309
19					.0000005	.0000072	.0000601	.0003381
20					.0000001	.0000018	.0000179	.0001157
21						.0000004	.0000050	.0000373
22						.0000001	.0000013	.0000114
23							.0000003	.0000033
24							.0000001	.0000009
25								.0000008
26								.0000001
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$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 100

p	.17	.18	.19	.20	.21	.22	.23	.24
26	.0151411	.0294884	.0527579	.0874754	.1354531	.1972269	.2717039	.3561485
27	.0080896	.0167784	.0318496	.0558327	.0910983	.1392074	.2008977	.2747657
28	.0041311	.0091318	.0184078	.0341516	.0587836	.0945340	.1429318	.2043298
29	.0020174	.0047556	.0101875	.0200208	.0363882	.0616099	.0977895	.1463383
30	.0009425	.0023706	.0054002	.0112490	.0216079	.0385543	.0643128	.1008717
31	.0004214	.0011316	.0027425	.0060593	.0123093	.0231643	.0406462	.0666914
32	.0001804	.0005174	.0013349	.0031297	.0067280	.0133625	.0246838	.0428609
33	.0000740	.0002267	.0006229	.0015504	.0035288	.0074013	.0144029	.0261619
34	.0000291	.0000953	.0002787	.0007369	.0017765	.0039366	.0080749	.0154257
35	.0000110	.0000384	.0001197	.0003361	.0008585	.0020110	.0043501	.0087447
36	.0000040	.0000148	.0000493	.0001471	.0003984	.0009868	.0022521	.0047668
37	.0000014	.0000055	.0000195	.0000619	.0001776	.0004652	.0011805	.0024977
38	.0000005	.0000020	.0000074	.0000250	.0000760	.0002107	.0005359	.0011887
39	.0000001	.0000007	.0000027	.0000097	.0000313	.0000918	.0002464	.0006099
40		.0000002	.0000009	.0000036	.0000124	.0000384	.0001069	.0002843
41		.0000001	.0000003	.0000013	.0000047	.0000154	.0000463	.0001274
42			.0000001	.0000004	.0000017	.0000060	.0000189	.0000549
43				.0000001	.0000006	.0000022	.0000074	.0000228
44					.0000002	.0000008	.0000028	.0000091
45					.0000001	.0000003	.0000010	.0000038
46						.0000001	.0000004	.0000013
47							.0000001	.0000005
48								.0000002
49								.0000001

p	.25	.26	.27	.28	.29	.30	.31	.32
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
7	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
8	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
9	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
10	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
11	.9999662	.9999407	.9999751	.9999898	.9999960	.9999984	.9999994	.9999998
12	.9999665	.9999211	.9999211	.9999662	.9999860	.9999943	.9999978	.9999992
13	.9999726	.9999097	.9999732	.9999882	.9999957	.9999981	.9999992	.9999996
14	.9999422	.9999688	.9999407	.9999712	.9999872	.9999943	.9999975	.9999989
15	.9994592	.9997513	.9998513	.9999286	.9999597	.9999842	.9999925	.9999969
16	.9989167	.9993893	.9996748	.9998221	.9999162	.9999950	.9999910	.9999939
17	.9980894	.9987811	.9993190	.9996329	.9998833	.9999311	.9999558	.9999751
18	.9963737	.9977524	.9986716	.9992500	.9995053	.9997371	.9998941	.9999436
19	.9936988	.9960146	.9975657	.9985334	.9991803	.9995474	.9998586	.9999732
20	.9904696	.9934267	.9958065	.9974108	.9984573	.9991128	.9995085	.9997311
21	.8511689	.8972957	.9315668	.9559572	.9726114	.9835371	.9904621	.9946217
22	.7886550	.8478910	.8943133	.9290661	.9539995	.9711687	.9825308	.9897546
23	.7136299	.7855585	.8448353	.8915137	.9267013	.9521343	.9697836	.9815569
24	.6289207	.7113870	.7827741	.8419880	.8888884	.9244692	.9503617	.9684388
25	.5383289	.6275642	.7091296	.7801956	.8395367	.8864298	.9223665	.9486817
26	.4465292	.5381392	.6263250	.7071433	.7778087	.8368699	.8841306	.9203897
27	.3587602	.4475057	.5379796	.6251935	.7033151	.7756008	.8343775	.8803751
28	.2776195	.3603291	.4484241	.5378479	.6241615	.7036338	.7735604	.8324503
29	.2075388	.2802817	.3620669	.4492891	.5377420	.6233218	.7028696	.7716777
30	.1495410	.2105419	.2827668	.3637841	.4501053	.5376603	.6223680	.7006736
31	.1037872	.1525510	.2133521	.2850878	.3653898	.4508764	.5376612	.6215945
32	.0693489	.1064426	.1519787	.2155017	.2872560	.3668920	.4516059	.5375835
33	.0445963	.0716866	.1091439	.1510334	.2184418	.2892814	.3683980	.4518968
34	.0275546	.0464509	.0739064	.1115967	.1605240	.2207422	.2911732	.3696140
35	.0164267	.0289785	.0462236	.0760105	.1119066	.1628583	.2228918	.2929398
36	.0094070	.0174022	.0303110	.0499138	.0780009	.1160786	.1650434	.2248985
37	.0051821	.0100584	.0183489	.0315898	.0515212	.0798800	.1181174	.1670860
38	.0027461	.0051952	.0094959	.0162338	.0281130	.0454599	.0704499	.1059273
39	.0014000	.0029954	.0060032	.0113167	.0201444	.0339790	.0544871	.0833127
40	.0006866	.0015433	.0032439	.0064036	.0119183	.0209886	.0350865	.0558460
41	.0003240	.0007652	.0016875	.0034898	.0067943	.0124984	.0217943	.0361346
42	.0001472	.0003652	.0008451	.0018316	.0037316	.0071736	.0130530	.0228600
43	.0000642	.0001677	.0004075	.0009257	.0019743	.0039678	.0075394	.0135863
44	.0000270	.0000741	.0001891	.0004855	.0010061	.0020146	.0039127	.0076903
45	.0000109	.0000315	.0000845	.0002111	.0004938	.0010857	.0022516	.0044179
46	.0000043	.0000129	.0000363	.0000952	.0002334	.0005370	.0011640	.0023844
47	.0000016	.0000051	.0000150	.0000414	.0001068	.0002558	.0005797	.0012408
48	.0000006	.0000019	.0000060	.0000173	.0000466	.0001174	.0002781	.0006218
49	.0000002	.0000007	.0000023	.0000070	.0000196	.0000519	.0001285	.0003001
50	.0000001	.0000002	.0000008	.0000027	.0000080	.0000231	.0000578	.0001396
51		.0000001	.0000003	.0000010	.0000031	.0000090	.0000245	.0000628
52			.0000001	.0000004	.0000012	.0000036	.0000101	.0000270
53				.0000001	.0000004	.0000014	.0000040	.0000118
54					.0000001	.0000006	.0000015	.0000045
55						.0000002	.0000006	.0000017
56						.0000001	.0000002	.0000006
57							.0000001	.0000002
58								.0000001

p	.33	.34	.35	.36	.37	.38	.39	.40
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000

$$P(c, n, v) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r} \quad \text{if } v = 100$$

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$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 100

	.41	.42	.43	.44	.45	.46	.47	.48
34	.9376142	.9587329	.9735975	.9836697	.9902400	.9943663	.9968508	.9983125
35	.9077728	.9368205	.9581224	.9731357	.9813673	.9890039	.9942457	.9967906
36	.8686656	.9068989	.9361082	.9575779	.9727637	.9831007	.9898785	.9941414
37	.8195975	.8677772	.9061231	.9354785	.9570993	.9724216	.9828704	.9897268
38	.7606169	.8187748	.8669959	.9053114	.9349305	.9566863	.9719197	.9826856
39	.6926656	.7599453	.8180598	.8663114	.9048594	.9344835	.9561387	.9718881
40	.6175972	.6922211	.7593717	.8174489	.8657460	.9043689	.9340770	.9560568
41	.5380438	.6174326	.6918547	.7588938	.8169431	.8652738	.9039718	.9337704
42	.4571480	.5381701	.6173173	.6915644	.7585094	.8165373	.8649016	.9036853
43	.3781645	.4575572	.5383276	.6172502	.6913487	.7582169	.8163318	.8646890
44	.3041405	.3788112	.4579520	.5384920	.6172305	.6913061	.7580148	.8162838
45	.2375001	.3049405	.3794032	.4583273	.5386714	.6173574	.6911357	.7579019
46	.1798705	.2383720	.3085623	.3799441	.4586639	.5388657	.6173304	.6911366
47	.1319875	.1807359	.2391492	.3063077	.3804352	.4590222	.5390750	.6174492
48	.0937570	.1327833	.1814996	.2398336	.3068785	.3808776	.4593431	.5392995
49	.0644227	.0944419	.1334793	.1821632	.2404266	.3073758	.3813723	.4594469
50	.0427897	.0649775	.0950355	.1340766	.1827282	.2409298	.3078009	.3816199
51	.0274560	.0432146	.0654541	.0955386	.1345762	.1831955	.2413440	.3081548
52	.0170093	.0277642	.0435758	.0658325	.0959516	.1349788	.1835660	.2416700
53	.0086233	.0140307	.0280234	.0438733	.0661729	.0962750	.1352849	.1838498
54	.0032593	.0059495	.0104208	.0175375	.0283934	.0442767	.0665800	.0966534
55	.0017459	.0033103	.0060189	.0105089	.0176406	.0285038	.0443823	.0666666
56	.0009008	.0017745	.0033504	.0060712	.0105711	.0177069	.0285642	.0444237
57	.0004474	.0008160	.0015118	.0027965	.0041060	.0064072	.0101731	.0177280
58	.0002139	.0004151	.0007274	.0011818	.0019976	.0031234	.0046171	.0066008
59	.0000983	.0002175	.0004607	.0009348	.0016202	.0024044	.0036131	.0050608
60	.0000435	.0001000	.0002201	.0004640	.0009382	.0016217	.0024098	.0036152
61	.0000185	.0000442	.0001011	.0002214	.0004651	.0009376	.0016163	.0024040
62	.0000075	.0000187	.0000446	.0001015	.0002215	.0004639	.0009329	.0016039
63	.0000029	.0000076	.0000189	.0000447	.0001013	.0002204	.0004604	.0009242
64	.0000011	.0000030	.0000077	.0000189	.0000445	.0001006	.0002168	.0004347
65	.0000004	.0000011	.0000030	.0000077	.0000187	.0000440	.0000998	.0002147
66	.0000001	.0000004	.0000011	.0000030	.0000076	.0000185	.0000438	.0000978
67	.0000000	.0000001	.0000004	.0000011	.0000029	.0000074	.0000180	.0000428
68	.0000000	.0000000	.0000001	.0000004	.0000011	.0000029	.0000072	.0000175
69	.0000000	.0000000	.0000000	.0000001	.0000004	.0000010	.0000028	.0000070
70	.0000000	.0000000	.0000000	.0000000	.0000001	.0000004	.0000010	.0000026
71	.0000000	.0000000	.0000000	.0000000	.0000001	.0000004	.0000010	.0000026
72	.0000000	.0000000	.0000000	.0000000	.0000001	.0000004	.0000010	.0000026
73	.0000000	.0000000	.0000000	.0000000	.0000001	.0000004	.0000010	.0000026
74	.0000000	.0000000	.0000000	.0000000	.0000001	.0000004	.0000010	.0000026

	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
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15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	1.00000000	1.00000000
19	1.00000000	1.00000000
20	1.00000000	1.00000000
21	1.00000000	1.00000000
22	1.00000000	1.00000000
23	1.00000000	1.00000000
24	.99999999	1.00000000
25	.99999997	.99999999
26	.99999992	.99999997
27	.99999978	.99999992
28	.99999941	.99999977
29	.99999848	.99999937
30	.99999685	.99999839
31	.99999120	.99999607
32	.99998023	.99999084
33	.99995751	.99997956
34	.99991253	.99995631
35	.99982736	.99991050
36	.99967306	.99982412
37	.99940539	.99966814
38	.99906055	.99939835
39	.9985197	.99895106
40	.9976969	.99823999
41	.9958393	.99715560
42	.99335431	.99536870
43	.99034505	.9933947
44	.98644523	.99033260
45	.98159130	.98643735
46	.97578774	.98158992
47	.96918082	.97579408
48	.96176135	.96913503
49	.95359393	.96178833
50	.94499342	.95359746
51	.93619913	.94498054
52	.92684373	.9361767

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 100

x	.49	.50
53	.8419083	.3086497
54	.1840185	.2420592
55	.1336088	.1841088
56	.0967085	.1356868
57	.0666751	.0966740
58	.0444006	.0666083
59	.0288344	.0443130
60	.0176887	.0288440
61	.0105588	.0176001
62	.0060896	.0104894
63	.0033568	.0060168
64	.0017847	.0033186
65	.0009118	.0017588
66	.0004468	.0008950
67	.0002101	.0004369
68	.0000947	.0002044
69	.0000408	.0000916
70	.0000168	.0000393
71	.0000066	.0000161
72	.0000028	.0000063
73	.0000009	.0000023
74	.0000003	.0000008
75	.0000001	.0000003
76		.0000001

$$F(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 104

	.01	.02	.03	.04	.05	.06	.07	.08
1	.5376280	.8700328	.9538741	.9838045	.9943755	.9980684	.9993442	.9997799
2	.1247035	.6021413	.8927903	.9564821	.9773193	.9856159	.9903588	.9938471
3	.0012219	.0287827	.0500795	.0776525	.0957963	.0983877	.9953588	.9978415
4	.0018984	.0146840	.0359575	.0784177	.1491401	.0621615	.9289912	.9653287
5	.0035817	.0263446	.072634	.1791115	.3729258	.7312499	.8430484	.9139839
6	.0055635	.0161906	.0438764	.1180056	.2530018	.5691423	.7175534	.8272867
7	.0077354	.0229055	.06127158	.1406015	.2414860	.4035856	.5664196	.7067104
8	.0099088	.0309945	.0812419	.1848873	.332918	.5201703	.7420357	.8644063
9	.0000009	.0003042	.0034383	.0201327	.0663331	.1526086	.2754972	.4190132
10	.0000001	.0000375	.0009443	.0073304	.0299334	.0816639	.1693006	.2883700
11		.0000062	.0002347	.0024328	.0123082	.0400027	.0957623	.1838554
12		.0000009	.0000531	.0007312	.0046341	.0180037	.0499716	.1086710
13		.0000001	.0000110	.0002035	.0016048	.0074722	.0241220	.0596377
14			.0000002	.0000517	.0005133	.0038701	.0108017	.0304473
15			.0000004	.0000122	.0001522	.0010236	.0044996	.0144923
16			.0000001	.0000027	.0000420	.0003400	.0017483	.0064454
17				.0000006	.0000108	.0001035	.0006353	.0026844
18				.0000001	.0000006	.0000025	.0000164	.0001291
19					.0000006	.0000004	.0000092	.0003855
20					.0000001	.0000002	.0000209	.0001335
21						.0000005	.0000054	.0000436
22						.0000001	.0000014	.0000135
23							.0000004	.0000039
24							.0000001	.0000011
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$$P(n, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 101

x	.17	.18	.19	.20	.21	.22	.23	.24
26	.0171701	.0331014	.0586290	.0962810	.1476004	.2128883	.2906045	.3775901
27	.0093883	.0190662	.0358222	.0615131	.1004138	.1520497	.2171831	.2949976
28	.0048041	.0105082	.0209618	.0384878	.0656497	.1043841	.1552635	.2213340
29	.0023767	.0054333	.0117494	.0228465	.0410912	.0685532	.1063221	.1542561
30	.0011352	.0027999	.0063098	.0120032	.0247117	.0436266	.0720120	.1117836
31	.0005100	.0013546	.0032475	.0070973	.0142620	.0265501	.0460894	.0750466
32	.0002214	.0006280	.0016023	.0037156	.0079001	.0153189	.0283558	.0484762
33	.0000921	.0002791	.0007581	.0018663	.0042006	.0087127	.0167675	.0301217
34	.0000367	.0001189	.0003441	.0008992	.0021445	.0046989	.0095303	.0180024
35	.0000140	.0000486	.0001499	.0004168	.0010513	.0024346	.0052068	.0103481
36	.0000052	.0000191	.0000627	.0001749	.0004950	.0012121	.0027346	.0057810
37	.0000018	.0000072	.0000288	.0000789	.0002239	.0005800	.0013808	.0030428
38	.0000006	.0000022	.0000097	.0000323	.0000974	.0002667	.0006704	.0015560
39	.0000002	.0000009	.0000036	.0000127	.0000407	.0001179	.0003130	.0007486
40	.0000001	.0000003	.0000013	.0000048	.0000163	.0000501	.0001405	.0003624
41		.0000001	.0000004	.0000018	.0000063	.0000205	.0000607	.0001651
42			.0000001	.0000006	.0000023	.0000081	.0000252	.0000723
43				.0000002	.0000008	.0000030	.0000101	.0000305
44				.0000001	.0000003	.0000011	.0000039	.0000124
45					.0000001	.0000004	.0000014	.0000048
46						.0000001	.0000003	.0000018
47							.0000002	.0000007
48							.0000001	.0000008
49								.0000001

x	.25	.26	.27	.28	.29	.30	.31	.32
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	.9999995	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	.9999976	.9999991	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
9	.9999902	.9999962	.9999986	.9999995	.9999998	.9999999	1.0000000	1.0000000
10	.9999647	.9999856	.9999943	.9999978	.9999992	.9999997	.9999999	1.0000000
11	.9998864	.9999515	.9999799	.9999919	.9999968	.9999986	.9999996	.9999998
12	.9996706	.9998523	.9999357	.9999729	.9999889	.9999956	.9999983	.9999994
13	.9991310	.9993906	.9998131	.9999173	.9999645	.9999852	.9999940	.9999977
14	.9978998	.9989615	.9995028	.9997694	.9998963	.9999548	.9999809	.9999922
15	.9953200	.9975719	.9987812	.9994078	.9997213	.9998729	.9999438	.9999759
16	.9903384	.9947401	.9972333	.9985921	.9993066	.9995693	.9998478	.9999316
17	.9813962	.9893924	.9941560	.9968873	.9983962	.9992003	.9996140	.9998195
18	.9665086	.9799977	.9884659	.9935722	.9965359	.9981953	.9990899	.9995588
19	.9433349	.9645937	.9786426	.9875556	.9929930	.9961853	.9979913	.9987766
20	.9095993	.9409509	.9627721	.9773356	.9866696	.9924222	.9958350	.9977860
21	.8634941	.9068923	.9370555	.9610396	.9760801	.9858098	.9918631	.9954887
22	.8042160	.8607362	.9043718	.9365956	.9593969	.9748793	.9849801	.9913189
23	.7323637	.8017650	.8561944	.9020884	.9346178	.9578446	.9737352	.9841834
24	.6500980	.7308976	.7995307	.8556532	.8998542	.9327687	.9563825	.9726498
25	.5609768	.6493321	.7290137	.7974975	.8537067	.8978416	.9310450	.9550108
26	.4694791	.5613897	.6486822	.7275979	.7956518	.8517379	.8959837	.9294431
27	.3803275	.4710704	.5618329	.6481394	.7263382	.7939815	.8499390	.8948739
28	.2977797	.3899210	.4786041	.5623047	.6476961	.7252239	.7924757	.8483018
29	.2250590	.3010680	.3853833	.4740856	.5628037	.6473454	.7242456	.7911849
30	.1640405	.2286742	.3041778	.3877855	.4755199	.5633287	.6470817	.7233949
31	.1152857	.1676287	.2320941	.3071228	.3899573	.4769116	.5630709	.6468998
32	.0779505	.1185048	.1710315	.2353314	.3099148	.3928873	.4782545	.5644534
33	.0507845	.0807491	.1216273	.1742590	.2383979	.3125646	.3941234	.4795828
34	.0318450	.0530122	.0834208	.1245990	.1773202	.2413040	.3150819	.3960725
35	.0192187	.0335213	.0531500	.0859746	.1274257	.1802235	.2440590	.3174752
36	.0111619	.0204121	.0351174	.0572209	.0884136	.1301125	.1829764	.2466715
37	.0062883	.0119678	.0215787	.0367206	.0592003	.0907396	.1326644	.1855660
38	.0033551	.0067857	.0127622	.0227151	.0378364	.0610959	.0928958	.1350861
39	.0017365	.0036714	.0072702	.0135419	.0238183	.0396990	.0629076	.0950613
40	.0008649	.0019209	.0039889	.0077792	.0143039	.0248857	.0411007	.0646513
41	.0004146	.0009475	.0021078	.0043057	.0082803	.0150455	.0259149	.0424422
42	.0001913	.0004692	.0010726	.0022959	.0046198	.0087710	.0157648	.0269038
43	.0000850	.0002190	.0005256	.0011793	.0024839	.0049295	.0092493	.0164579
44	.0000363	.0000985	.0002481	.0005835	.0012869	.0026706	.0052331	.0097791
45	.0000149	.0000486	.0001197	.0003281	.0006424	.0013944	.0028347	.0055891
46	.0000059	.0000178	.0000493	.0001277	.0003089	.0007016	.0015013	.0030351
47	.0000023	.0000071	.0000208	.0000565	.0001431	.0003402	.0007608	.0016063
48	.0000008	.0000028	.0000084	.0000240	.0000639	.0001589	.0003716	.0008195
49	.0000003	.0000010	.0000033	.0000099	.0000273	.0000715	.0001749	.0004030
50	.0000001	.0000004	.0000012	.0000039	.0000114	.0000310	.0000793	.0001909
51		.0000001	.0000004	.0000015	.0000045	.0000129	.0000346	.0000878
52			.0000002	.0000005	.0000017	.0000052	.0000146	.0000383
53			.0000001	.0000003	.0000009	.0000028	.0000079	.0000208
54				.0000001	.0000003	.0000010	.0000033	.0000086
55					.0000001	.0000004	.0000014	.0000039
56						.0000001	.0000003	.0000010
57							.0000001	.0000004
58								.0000001

x	.33	.34	.35	.36	.37	.38	.39	.40
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 101

	.41	.42	.43	.44	.45	.46	.47	.48
35	.9200086	.9460237	.9647767	.9777819	.9864460	.9920322	.9954748	.9975211
36	.8846995	.9194660	.9455743	.9644332	.9775353	.9862944	.9919279	.9954130
37	.8397154	.8842083	.9190167	.9452022	.9641463	.9773340	.9861614	.9910455
38	.7847989	.8393558	.8848304	.9186590	.9449064	.9639245	.9771778	.9860604
39	.7203256	.7846537	.8392102	.8835341	.9183914	.9446860	.9637605	.9770666
40	.6483754	.7206652	.7846076	.8389525	.8833470	.9182125	.9445400	.9636556
41	.5706606	.6486437	.7208870	.7846585	.8389044	.8832576	.9181210	.9444677
42	.4903117	.5714650	.6493684	.7211893	.7849046	.8390561	.8832643	.9181157
43	.4105464	.4914160	.5712931	.6499485	.7213710	.7850443	.8391063	.8833659
44	.3344912	.4118848	.4925135	.5731486	.6450583	.7220311	.7853765	.8393537
45	.2648227	.3359662	.4131792	.4935998	.5740230	.6481273	.7225684	.7856002
46	.2034987	.2663308	.3373709	.4144327	.4946782	.5749259	.6520189	.7231840
47	.1516198	.2044431	.2677498	.3387078	.4186471	.4957502	.5758551	.6528192
48	.1094315	.1589234	.2068889	.2690822	.3399790	.4188341	.4968171	.5768114
49	.0764497	.1105453	.1541280	.2075382	.2703300	.3411866	.4179554	.4978802
50	.0516592	.0773526	.1115663	.1552347	.2086925	.2714949	.3423324	.4190729
51	.0337428	.0523550	.0781741	.1124953	.1562446	.2097533	.2735787	.3434179
52	.0218285	.0342534	.0529835	.0789144	.1133327	.1571565	.2107216	.2735826
53	.0129733	.0216494	.0347109	.0535442	.0795733	.1140787	.1579770	.2115985
54	.0076285	.0132112	.0219667	.0351149	.0540367	.0801508	.1147336	.1587007
55	.0043270	.0077798	.0134209	.0222436	.0354645	.0544605	.0806465	.1152973
56	.0023664	.0044187	.0079117	.0136015	.0234794	.0357594	.0548158	.0810602
57	.0012473	.0024195	.0044979	.0080237	.0137524	.0236735	.0359987	.0551003
58	.0005333	.0012766	.0024647	.0045639	.0081153	.0138731	.0240253	.0361821
59	.0003096	.0006487	.0013011	.0025016	.0046164	.0081859	.0139430	.0229343
60	.0001457	.0003173	.0006614	.0013207	.0025300	.0046551	.0082353	.0140219
61	.0000660	.0001494	.0003235	.0006712	.0013351	.0025497	.0046798	.0082631
62	.0000287	.0000676	.0001522	.0003281	.0006780	.0013443	.0025605	.0046901
63	.0000120	.0000294	.0000689	.0001543	.0003311	.0006818	.0013481	.0025623
64	.0000048	.0000123	.0000299	.0000697	.0001554	.0003324	.0006825	.0013464
65	.0000019	.0000049	.0000125	.0000302	.0000701	.0001557	.0003320	.0006800
66	.0000007	.0000019	.0000050	.0000126	.0000303	.0000700	.0001551	.0003299
67	.0000003	.0000007	.0000019	.0000050	.0000126	.0000302	.0000700	.0001551
68	.0000001	.0000002	.0000007	.0000019	.0000050	.0000125	.0000302	.0000700
69		.0000001	.0000002	.0000007	.0000019	.0000050	.0000123	.0000302
70			.0000001	.0000002	.0000007	.0000019	.0000050	.0000120
71				.0000001	.0000002	.0000007	.0000018	.0000047
72					.0000001	.0000002	.0000007	.0000018
73						.0000001	.0000002	.0000008
74							.0000001	.0000002
75								.0000001

	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	1.0000000	1.0000000
8	1.0000000	1.0000000
9	1.0000000	1.0000000
10	1.0000000	1.0000000
11	1.0000000	1.0000000
12	1.0000000	1.0000000
13	1.0000000	1.0000000
14	1.0000000	1.0000000
15	1.0000000	1.0000000
16	1.0000000	1.0000000
17	1.0000000	1.0000000
18	1.0000000	1.0000000
19	1.0000000	1.0000000
20	1.0000000	1.0000000
21	1.0000000	1.0000000
22	1.0000000	1.0000000
23	1.0000000	1.0000000
24	.9999999	1.0000000
25	.9999998	.9999999
26	.9999995	.9999998
27	.9999992	.9999994
28	.9999989	.9999984
29	.9999983	.9999977
30	.9999974	.9999968
31	.9999964	.9999953
32	.9999951	.9999934
33	.9999935	.9999910
34	.9999917	.9999874
35	.9999896	.9999821
36	.9999872	.9999731
37	.9999845	.9999613
38	.9999815	.9999413
39	.9999782	.9999247
40	.9999746	.9999016
41	.9999707	.9998720
42	.9999665	.9998361
43	.9999620	.9997940
44	.9999572	.9997458
45	.9999521	.9996916
46	.9999467	.9996323
47	.9999411	.9995680
48	.9999352	.9995087
49	.9999290	.9994444
50	.9999225	.9993750
51	.9999157	.9993006
52	.9999087	.9992212

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n = 101

$$P(c, n, v) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

	.49	.50
56	.00000000	.00000000
57	.00000000	.00000000
58	.00000000	.00000000
59	.00000000	.00000000
60	.00000000	.00000000
61	.00000000	.00000000
62	.00000000	.00000000
63	.00000000	.00000000
64	.00000000	.00000000
65	.00000000	.00000000
66	.00000000	.00000000
67	.00000000	.00000000
68	.00000000	.00000000
69	.00000000	.00000000
70	.00000000	.00000000
71	.00000000	.00000000
72	.00000000	.00000000
73	.00000000	.00000000
74	.00000000	.00000000
75	.00000000	.00000000
76	.00000000	.00000000
77	.00000000	.00000000

$$P(c, n, p) = \sum_{i=0}^n \binom{n}{i} p^i (1-p)^{n-i}$$

n = 102

	.17	.18	.19	.20	.21	.22	.23	.24
25	.0338885	.0607985	.1006391	.1580167	.2339059	.3053688	.3937171	.4900891
26	.0194081	.0370387	.0649488	.1055808	.1603535	.2291286	.3094438	.3998448
27	.0105683	.0215926	.0401554	.0689792	.1103298	.1654348	.2340700	.3148878
28	.0055684	.0110486	.0217852	.0432225	.0788667	.1248706	.1908780	.2774938
29	.0027693	.0054370	.0113497	.0235974	.0468317	.0746700	.1128331	.1748909
30	.0013379	.0028377	.0073433	.0149719	.0301514	.0491744	.0760388	.1132170
31	.0006146	.0012148	.0030893	.0062785	.0124565	.0203062	.0308016	.0438615
32	.0002705	.0005388	.0013149	.0026101	.0050809	.0077190	.0114888	.0164851
33	.0001141	.0002319	.0004985	.0009222	.0017755	.0031201	.0049434	.0072881
34	.0000461	.0000917	.0001828	.0003529	.0006743	.0011948	.0020910	.0033110
35	.0000179	.0000361	.0000768	.0001469	.0002809	.0005398	.0009801	.0015851
36	.0000067	.0000134	.0000272	.0000532	.0001019	.0001961	.0003302	.0005115
37	.0000024	.0000049	.0000093	.0000181	.0000329	.0000610	.0001070	.0001746
38	.0000008	.0000014	.0000026	.0000047	.0000089	.0000136	.0000238	.0000391
39	.0000003	.0000006	.0000011	.0000021	.0000036	.0000061	.0000100	.0000158
40	.0000001	.0000002	.0000004	.0000007	.0000012	.0000021	.0000033	.0000053
41		.0000001	.0000002	.0000004	.0000007	.0000012	.0000021	.0000033
42			.0000001	.0000002	.0000004	.0000007	.0000012	.0000021
43				.0000001	.0000002	.0000004	.0000007	.0000012
44					.0000001	.0000002	.0000004	.0000007
45						.0000001	.0000002	.0000004
46							.0000001	.0000002
47								.0000001
48								
49								

	.25	.26	.27	.28	.29	.30	.31	.32
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	.9999998	.9999997	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
9	.9999997	.9999995	.9999996	.9999997	.9999999	1.0000000	1.0000000	1.0000000
10	.9999971	.9999984	.9999955	.9999963	.9999994	.9999998	.9999999	1.0000000
11	.9999965	.9999964	.9999965	.9999975	.9999975	.9999975	.9999975	.9999975
12	.9999925	.9999970	.9999975	.9999978	.9999975	.9999975	.9999975	.9999975
13	.9999959	.9999957	.9999962	.9999971	.9999971	.9999971	.9999971	.9999971
14	.9999976	.9999950	.9999966	.9999971	.9999971	.9999971	.9999971	.9999971
15	.9999949	.9999932	.9999976	.9999970	.9999970	.9999970	.9999970	.9999970
16	.9999973	.9999974	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
17	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
18	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
19	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
20	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
21	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
22	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
23	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
24	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
25	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
26	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
27	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
28	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
29	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
30	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
31	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
32	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
33	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
34	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
35	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
36	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
37	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
38	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
39	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
40	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
41	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
42	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
43	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
44	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
45	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
46	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
47	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
48	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
49	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
50	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
51	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
52	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
53	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
54	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
55	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
56	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
57	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
58	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
59	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973

	.33	.34	.35	.36	.37	.38	.39	.40
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000

n n 102

-204-

$$P(x, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 102

x	.41	.42	.43	.44	.45	.46	.47	.48
32	.9823381	.9894642	.9939300	.9966238	.9981877	.9990616	.9995314	.9997747
33	.9710382	.9802603	.9892894	.9938184	.9965564	.9981433	.9990409	.9995210
34	.9543815	.9707383	.9818634	.9891427	.9937258	.9965007	.9981179	.9990248
35	.9308911	.9540703	.9704944	.9816872	.9890242	.9936507	.9964868	.9980937
36	.8991762	.9306202	.9538314	.9703060	.9815514	.9889339	.9935949	.9964249
37	.8591389	.8990165	.9304365	.9537634	.9701724	.9814589	.9888716	.9935579
38	.8071147	.8591939	.8990549	.9303380	.9535653	.9700929	.9814001	.9888373
39	.7468777	.8076286	.8593318	.8990891	.9303232	.9535357	.9700666	.9813936
40	.6779568	.7475404	.8080403	.8585684	.8991170	.9303503	.9535736	.9700939
41	.6025526	.6790088	.7482869	.8085479	.8589036	.8993368	.9305379	.9536779
42	.5238548	.6039641	.6801214	.7491158	.8091495	.8593348	.8996469	.9307447
43	.4432502	.5250377	.6034355	.6812945	.7500261	.8098437	.8598406	.8998048
44	.3656738	.4452886	.5268187	.6049389	.6825280	.7510172	.8098985	.8596988
45	.2933868	.3678519	.4478930	.5285999	.6084753	.6830282	.7520065	.8115089
46	.2286415	.2955777	.3699685	.4492662	.5303834	.6100459	.6851774	.7532398
47	.1728900	.2307259	.2976869	.3780268	.4612111	.5381710	.6116521	.6865943
48	.1267286	.1747717	.2330717	.2997174	.3740296	.4531301	.5330249	.6138251
49	.0899723	.1281441	.1765572	.2346175	.3016720	.3759799	.4550258	.5357671
50	.0618233	.0912935	.1298679	.1782482	.2364293	.3035511	.3778300	.4569004
51	.0410886	.0628540	.09285328	.1313007	.1798461	.2381544	.3053630	.3797323
52	.0263971	.0418561	.0638154	.0936900	.1326431	.1813321	.2397945	.3071038
53	.0163841	.0269431	.0425681	.0647071	.0947650	.1338254	.1887670	.2413509
54	.0098128	.0165735	.0274467	.0432238	.0655282	.0957276	.1350280	.1844916
55	.0056806	.0100610	.0170956	.0275069	.0438220	.0662780	.0966675	.1361309
56	.0031702	.0058304	.0102807	.0174040	.0283227	.0443619	.0669559	.0974940
57	.0017061	.0032592	.0059658	.0104779	.0176795	.0286930	.0448425	.0675610
58	.0008850	.0017366	.0033390	.0060862	.0106520	.0179213	.02890168	.0452628
59	.0004423	.0008014	.0015014	.0034090	.0061909	.0108020	.0181883	.0289832
60	.0002129	.0004365	.0008364	.0018403	.0034689	.0062793	.0109273	.0183998
61	.0000986	.0002199	.0004688	.0009569	.0018728	.0035182	.0063509	.0110873
62	.0000440	.0001019	.0002259	.0004791	.0009737	.0018988	.0035366	.0064081
63	.0000189	.0000455	.0001047	.0002308	.0004872	.0009865	.0019179	.0035837
64	.0000087	.0000219	.0000467	.0001069	.0002345	.0004931	.0009953	.0019301
65	.0000031	.0000080	.0000200	.0000476	.0001085	.0002370	.0004967	.0009999
66	.0000012	.0000032	.0000082	.0000204	.0000482	.0001094	.0002382	.0004980
67	.0000004	.0000012	.0000032	.0000084	.0000206	.0000485	.0001097	.0002388
68	.0000001	.0000004	.0000012	.0000033	.0000084	.0000206	.0000485	.0001094
69	.0000001	.0000002	.0000004	.0000012	.0000033	.0000084	.0000206	.0000482
70	.0000001	.0000001	.0000002	.0000004	.0000012	.0000033	.0000084	.0000206
71			.0000001	.0000002	.0000004	.0000012	.0000032	.0000082
72				.0000001	.0000002	.0000004	.0000012	.0000032
73					.0000001	.0000002	.0000004	.0000012
74						.0000001	.0000002	.0000004
75							.0000001	.0000001

x	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	1.00000000	1.00000000
19	1.00000000	1.00000000
20	1.00000000	1.00000000
21	1.00000000	1.00000000
22	1.00000000	1.00000000
23	1.00000000	1.00000000
24	1.00000000	1.00000000
25	.99999999	1.00000000
26	.99999997	.99999999
27	.99999990	.99999996
28	.99999974	.99999983
29	.99999926	.99999970
30	.99999812	.99999922
31	.99999547	.99999806
32	.99998956	.99999535
33	.99997696	.99998933
34	.99995127	.99997657
35	.99990118	.99995067
36	.9980768	.99990036
37	.9964049	.9980672
38	.9935396	.9963969
39	.9888306	.9933398
40	.9814060	.9888812
41	.9701709	.9814666
42	.9538474	.9702997
43	.9310693	.9540812
44	.9005323	.9314806
45	.8611907	.9012051
46	.8124722	.8619931
47	.7544711	.8135282
48	.6880735	.7557828
49	.6149765	.6896182
50	.5375726	.6166979

AMCP 706-109

$$P(r, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 102

r	.49	.50
51	.4587562	.5394045
52	.3615390	.4805955
53	.2687760	.4033021
54	.2029248	.3103978
55	.1532265	.2442172
56	.1171140	.1864718
57	.0882367	.1380069
58	.0680925	.0986949
59	.0486219	.0685494
60	.0295213	.0459188
61	.0184351	.0297003
62	.0111013	.0185334
63	.0064417	.0111488
64	.0035993	.0064602
65	.0019351	.0036031
66	.0010003	.0019328
67	.0004268	.0009964
68	.0002369	.0004933
69	.0001084	.0002343
70	.0000475	.0001067
71	.0000200	.0000465
72	.0000080	.0000194
73	.0000031	.0000078
74	.0000011	.0000030
75	.0000004	.0000011
76	.0000001	.0000004
77		.0000001

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 103

	.01	.02	.03	.04	.05	.06	.07	.08
1	.6448392	.8751795	.9566001	.9850742	.9949239	.9992933	.9994328	.9998137
2	.2753284	.6128018	.8183469	.9210178	.9674066	.9870723	.9950354	.9981454
3	.0849744	.3397148	.6002773	.8048978	.935422	.9505445	.9701550	.9907466
4	.0203412	.1520836	.3732151	.5939517	.7626608	.8720487	.9353794	.9690866
5	.0038945	.0563534	.1976516	.3950495	.5904484	.7467894	.8548876	.9219994
6	.0006251	.0176706	.0901416	.2309552	.4109849	.5884829	.7349269	.8409876
7	.0000657	.0047763	.0358324	.1192799	.2567093	.4234400	.5874527	.7257822
8	.0000102	.0011298	.0125571	.0546007	.1441925	.2774598	.4336335	.5870385
9	.0000011	.0002369	.0039188	.0225611	.0731292	.1656452	.2947000	.4422564
10	.0000001	.0000444	.0010987	.0083816	.0336457	.0903091	.1843168	.3093673
11		.0000075	.0002789	.0082880	.0141177	.0451075	.1062177	.2007450
12		.0000012	.0000645	.0087716	.0054264	.0207143	.0565183	.1208882
13		.0000002	.0000137	.0002467	.0019194	.0087772	.0278387	.0676504
14			.0000027	.0000644	.0006273	.0034437	.0127279	.0352447
15			.0000005	.0000156	.0001902	.0012551	.0054163	.0171898
16			.0000001	.0000035	.0000536	.0004262	.0021509	.0077835
17				.0000007	.0000141	.0001353	.0007991	.0033135
18				.0000001	.0000035	.0000432	.0002784	.0013844
19					.0000008	.0000112	.0000912	.0004979
20					.0000002	.0000089	.0000281	.0001764
21						.0000007	.0000082	.0000530
22						.0000002	.0000022	.0000187
23							.0000006	.0000056
24							.0000001	.0000016
25								.0000004
26								.0000001
	.09	.10	.11	.12	.13	.14	.15	.16
1	.9999396	.9999806	.9999939	.9999981	.9999994	.9999998	.9999999	1.0000000
2	.9952340	.9977590	.9991159	.9997122	.9999033	.9999688	.9999930	.9999977
3	.9862189	.9905033	.9954243	.9978444	.9992122	.9997199	.9999023	.9999622
4	.9858000	.9938059	.9973789	.9988265	.9995734	.9999351	.9999980	.9999972
5	.9603168	.9807575	.9910587	.9960020	.9982740	.9992787	.9997076	.9998848
6	.9102578	.9520511	.9755920	.9881057	.9944297	.9974852	.9989028	.9995334
7	.8293934	.8999343	.9443691	.9705186	.9850473	.9927155	.9965828	.9984522
8	.7185697	.8197418	.8908941	.9172858	.9562200	.9819590	.9909098	.9955966
9	.5870427	.7127918	.8115829	.8829050	.9307848	.9600445	.9788963	.9890497
10	.4497734	.5897356	.7081119	.8046294	.8758404	.9248343	.9565181	.9758988
11	.3220828	.4561465	.5878996	.7042944	.7986656	.8695772	.9193967	.9523524
12	.2153458	.3332764	.4622845	.5884190	.7011689	.7935257	.8640124	.9144335
13	.1344123	.2204389	.3412560	.4676355	.5894773	.6986088	.7890007	.8612768
14	.0783819	.1468988	.2403762	.3522491	.4726505	.5904476	.6965180	.7852283
15	.0427581	.0866555	.1584545	.2510548	.3604276	.4772557	.5915099	.6948823
16	.0218535	.0502583	.0984518	.1691794	.2609320	.3679246	.4815603	.5926493
17	.0104825	.0267933	.0576635	.1077728	.1791626	.2700351	.3748444	.4854108
18	.0047271	.0124504	.0318641	.0644016	.1166330	.1884828	.2704670	.3612768
19	.0020075	.0066723	.0166293	.0370001	.0719919	.1250133	.1972081	.2841159
20	.0008042	.0026463	.0082056	.0199678	.0421501	.0788592	.1330575	.2054019
21	.0003044	.0012032	.0038328	.0102130	.0234218	.0472753	.0855099	.1406707
22	.0001090	.0004816	.0016967	.0049555	.0123612	.0269539	.0523464	.0919359
23	.0000370	.0001820	.0007127	.0022833	.0062009	.0146236	.0305330	.0573413
24	.0000119	.0000659	.0002843	.0008001	.0023592	.0065546	.0169763	.0341331
25	.0000036	.0000226	.0001079	.0004168	.0013446	.0037186	.0090010	.0193977
26	.0000011	.0000073	.0000390	.0001654	.0005821	.0017454	.0045548	.0105284
27	.0000003	.0000023	.0000134	.0000626	.0002404	.0007817	.0022005	.0054602
28	.0000001	.0000007	.0000044	.0000226	.0000947	.0003343	.0010157	.0027071
29		.0000002	.0000014	.0000087	.0000357	.0001366	.0004482	.0012837
30		.0000001	.0000004	.0000026	.0000128	.0000534	.0001892	.0005826
31			.0000001	.0000008	.0000044	.0000200	.0000764	.0002531
32				.0000002	.0000015	.0000071	.0000296	.0001054
33				.0000001	.0000005	.0000024	.0000110	.0000420
34					.0000001	.0000008	.0000033	.0000161
35						.0000003	.0000013	.0000059
36						.0000001	.0000002	.0000007
37							.0000001	.0000002
38								.0000001
39								.0000001
	.17	.18	.19	.20	.21	.22	.23	.24
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
3	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
4	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
5	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
6	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
7	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
8	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
9	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
10	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
11	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
12	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
13	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
14	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
15	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
16	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
17	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
18	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
19	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
20	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
21	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
22	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
23	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
24	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
25	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
26	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
27	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
28	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
29	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
30	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
31	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
32	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
33	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
34	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
35	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
36	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
37	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
38	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
39	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999

$$H(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 103

x	.17	.18	.19	.20	.21	.22	.23	.24
25	.0377330	.0670430	.1099049	.1676925	.2399976	.3244296	.4168852	.5122175
26	.08116687	.0413154	.0717300	.1154679	.1736995	.2458966	.3296727	.4210485
27	.01012006	.0243729	.0448668	.0762995	.1108288	.1794456	.2515213	.3314677
28	.0064269	.0137665	.0268956	.0483739	.0807482	.1259946	.1849479	.2568917
29	.0032614	.0074471	.0154540	.0294243	.0518293	.0850741	.1309727	.1902215
30	.0015847	.0038595	.0085130	.0171725	.0319483	.0532250	.0892768	.1357707
31	.0007376	.0019170	.0044970	.0096171	.0189124	.0344582	.0585553	.0933564
32	.0003290	.0009129	.0022786	.0051693	.0107524	.0206452	.0369461	.0618154
33	.0001407	.0004169	.0011078	.0026673	.0058716	.0119119	.0224230	.0394051
34	.0000577	.0001827	.0005170	.0013216	.0030805	.0066001	.0130895	.0241788
35	.0000227	.0000768	.0002316	.0006289	.0015529	.0035156	.0073497	.0142793
36	.0000086	.0000310	.0000997	.0002875	.0007523	.0018004	.0039697	.0081164
37	.0000031	.0000120	.0000412	.0001263	.0003504	.0008867	.0020627	.0044402
38	.0000011	.0000045	.0000164	.0000533	.0001569	.0004200	.0010312	.0023381
39	.0000004	.0000016	.0000063	.0000217	.0000676	.0001914	.0004961	.0011851
40	.0000001	.0000006	.0000023	.0000085	.0000280	.0000839	.0002297	.0005783
41		.0000002	.0000008	.0000032	.0000112	.0000354	.0001023	.0002717
42		.0000001	.0000003	.0000011	.0000043	.0000144	.0000439	.0001229
43			.0000001	.0000004	.0000016	.0000056	.0000181	.0000535
44				.0000001	.0000006	.0000021	.0000072	.0000224
45					.0000002	.0000008	.0000028	.0000091
46						.0000003	.0000010	.0000035
47					.0000001	.0000001	.0000004	.0000013
48							.0000001	.0000005
49								.0000002
50								.0000001
x	.25	.26	.27	.28	.29	.30	.31	.32
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	.9999985	.9999994	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
9	.9999935	.9999976	.9999991	.9999997	.9999999	1.0000000	1.0000000	1.0000000
10	.9999763	.9999906	.9999964	.9999987	.9999995	.9999998	.9999999	1.0000000
11	.9999222	.9999677	.9999869	.9999949	.9999981	.9999993	.9999997	.9999999
12	.9997699	.9998994	.9999574	.9999825	.9999930	.9999973	.9999990	.9999996
13	.9993806	.9997157	.9998736	.9999455	.9999773	.9999908	.9999964	.9999986
14	.9984722	.9992638	.9996567	.9998450	.9999328	.9999712	.9999866	.9999953
15	.9965256	.9982431	.9991409	.9995935	.9998138	.9999174	.9999645	.9999852
16	.9926757	.9961152	.9980089	.9990133	.9995270	.9997805	.9999014	.9999571
17	.9856175	.9920031	.9957062	.9977723	.9988825	.9994578	.9997454	.9998843
18	.9735771	.9846093	.9913477	.9953024	.9975355	.9987501	.9993869	.9997091
19	.9544016	.9721975	.9836456	.9907133	.9949068	.9973008	.9986172	.9993150
20	.9258066	.9526882	.9709013	.9827294	.9901034	.9945222	.9976703	.9984854
21	.8857736	.9238988	.9511040	.9696890	.9812633	.9895208	.9941512	.9968456
22	.8330317	.8839197	.9221635	.9496454	.9685607	.9810490	.9889678	.9937958
23	.7675039	.8315637	.8822668	.9205924	.9483088	.9675160	.9802879	.9884464
24	.6905800	.7667802	.8302988	.8808023	.9191774	.9470906	.9665542	.9795809
25	.6051089	.6909075	.7662287	.8292226	.8795148	.9179113	.9459869	.9656743
26	.5150794	.6046684	.6913457	.7658168	.8283222	.8789342	.9167873	.9449943
27	.4250499	.5178758	.6082564	.6918868	.7655933	.8275866	.8774312	.9157990
28	.3394663	.4389054	.5206141	.6098722	.6925240	.7654884	.8270056	.8766175
29	.2620335	.3440572	.4326289	.5233013	.6115156	.6932516	.7655136	.8265705
30	.1958811	.2669584	.3484673	.4362329	.5259434	.6131863	.6940848	.7656614
31	.1403958	.2001395	.2716843	.3527717	.4397283	.5285458	.6148843	.6949591
32	.0973138	.1448551	.2048087	.2762254	.3568037	.4431252	.5311137	.6166097
33	.0650083	.1011506	.1491554	.2092999	.2805947	.3607554	.4464325	.5336515
34	.0418294	.0681127	.1048685	.1533033	.2136232	.2848040	.3645777	.4496581
35	.0259264	.0448140	.0711447	.1084695	.1573050	.2177880	.2888638	.3688805
36	.0154759	.0276603	.0465547	.0740948	.1119558	.1611663	.2218029	.2927839
37	.0088959	.0166742	.0293754	.0488678	.0749681	.1133294	.1648929	.2256759
38	.0049243	.0096845	.0178695	.0310673	.0510902	.0797578	.1185937	.1684900
39	.0026249	.0054191	.0104782	.0190577	.0327321	.0532794	.0824654	.1217428
40	.0013474	.0029213	.0059220	.0112777	.0202348	.0343662	.0554129	.0855099
41	.0006461	.0015178	.0032256	.0064383	.0120675	.0213972	.0359664	.0574888
42	.0003171	.0007591	.0016933	.0035361	.0069416	.0128566	.0228415	.0375328
43	.0001454	.0003659	.0008366	.0018746	.0038509	.0074534	.0136379	.0236648
44	.0000642	.0001699	.0004176	.0009380	.0020601	.0041684	.0079633	.0144087
45	.0000273	.0000760	.0001962	.0004719	.0010626	.0022486	.0044867	.0084690
46	.0000112	.0000328	.0000888	.0002241	.0005283	.0011698	.0024388	.0048043
47	.0000044	.0000136	.0000388	.0001025	.0002534	.0005869	.0012788	.0026398
48	.0000017	.0000054	.0000163	.0000452	.0001171	.0002839	.0006467	.0013888
49	.0000006	.0000021	.0000066	.0000192	.0000522	.0001324	.0003154	.0007075
50	.0000002	.0000008	.0000026	.0000079	.0000224	.0000595	.0001483	.0003476
51	.0000001	.0000003	.0000010	.0000031	.0000093	.0000258	.0000672	.0001647
52		.0000001	.0000004	.0000012	.0000037	.0000103	.0000294	.0000752
53			.0000001	.0000004	.0000014	.0000043	.0000124	.0000331
54				.0000002	.0000005	.0000017	.0000050	.0000141
55				.0000001	.0000002	.0000006	.0000020	.0000057
56					.0000001	.0000002	.0000007	.0000023
57						.0000001	.0000003	.0000009
58							.0000001	.0000003
59								.0000001
x	.33	.34	.35	.36	.37	.38	.39	.40
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

$n = 103$

	.33	.34	.35	.36	.37	.38	.39	.40
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
14	.99999998	.99999999	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
15	.99999999	.99999997	.99999999	.99999999	.99999999	1.00000000	1.00000000	1.00000000
16	.999999810	.99999996	.99999997	.99999998	.99999996	.99999999	.99999999	1.00000000
17	.999999431	.99999983	.99999991	.99999984	.99999986	.99999995	.99999998	.99999999
18	.999998644	.99999906	.99999974	.99999904	.99999923	.99999931	.99999946	.99999951
19	.999997188	.999998478	.999999318	.999999704	.99999876	.99999949	.99999980	.99999992
20	.999992429	.999996340	.999998389	.999999226	.99999961	.99999957	.99999941	.99999977
21	.99983557	.99991714	.99995962	.99998098	.99999133	.99999618	.99999837	.99999933
22	.99966286	.99982993	.99991011	.99995389	.99997907	.99999040	.99999574	.99999818
23	.99945799	.99994579	.99999074	.99993283	.99996372	.99997720	.99998946	.99999531
24	.999279582	.99931391	.99982230	.99979308	.99989671	.99994869	.99997337	.99998838
25	.99909287	.99975043	.99928407	.99960369	.99978803	.99989046	.99994531	.99997362
26	.99848750	.99983314	.99978057	.99925639	.99958633	.99977768	.99988457	.99994213
27	.994410992	.99415551	.99777891	.992567032	.99320304	.99570300	.99768008	.99987919
28	.99149406	.99433882	.99651131	.97703285	.9963372	.9997022	.9995507	.9998582
29	.9759454	.9142066	.9426481	.96230174	.9768866	.9860481	.9918707	.9954531
30	.8262733	.8754083	.9135922	.94260650	.9624567	.9764897	.9857760	.9916874
31	.7659254	.8261070	.8750000	.9130926	.9415783	.9620392	.9761643	.9855410
32	.6959311	.7662997	.8260634	.8747148	.9127036	.9411828	.9616934	.9758917
33	.6183627	.6969775	.7667793	.8261198	.8749213	.9124213	.9408761	.9615824
34	.5361635	.6201439	.6980958	.7673597	.8263344	.8749433	.9124213	.9408761
35	.4529095	.5386536	.6219533	.6992037	.7680373	.8266357	.8745503	.9121624
36	.3718727	.4558934	.5411255	.6237923	.7005395	.7688084	.8270428	.8747120
37	.2965732	.3783624	.4589159	.5435827	.6256610	.7018615	.7696704	.8275525
38	.2248142	.3002398	.3787572	.4518827	.5268283	.6075602	.6832485	.75

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 103

x	.41	.42	.43	.44	.45	.46	.47	.48
29	.99975139	.99986957	.99993395	.99996773	.99998480	.99999309	.99999698	.99999873
30	.99953086	.99974437	.99986556	.99993178	.99996661	.99998425	.99999284	.99999666
31	.99915886	.99952076	.99973830	.99986211	.99992992	.99996566	.99998378	.99999263
32	.99853489	.99913944	.99951222	.99973319	.99985921	.99992837	.99996488	.99998441
33	.99767112	.99851615	.99912849	.99950528	.99972905	.99985690	.99992713	.99996427
34	.99652108	.99750119	.99850366	.99912008	.99949993	.99972591	.99985517	.99992627
35	.99405822	.99610708	.99753831	.99849676	.99911397	.99949617	.99972375	.99985404
36	.99121793	.99404693	.99609965	.99753137	.99849142	.99911036	.99949400	.99972259
37	.98749760	.99122901	.99404963	.99609862	.99752930	.99848958	.99910916	.99949341
38	.98281608	.98753394	.99124920	.99406012	.99609395	.99753192	.99849117	.99911038
39	.97716566	.98286660	.98757994	.99127826	.99407821	.99611580	.99753934	.99849614
40	.97062144	.97727774	.98296654	.98763535	.99131898	.99410372	.99613854	.99755124
41	.96334512	.97077921	.97739808	.98305569	.98769996	.99136814	.99413647	.99615571
42	.95557550	.96354828	.97094325	.97752659	.98315388	.98777357	.99141657	.99417630
43	.94760321	.95581868	.96375504	.97111358	.97766316	.98326096	.98788602	.99147909
44	.93944602	.94787832	.95606239	.96376553	.97129021	.97780774	.98337681	.98794711
45	.93102245	.94057753	.94814891	.95630691	.96417990	.97147319	.97796028	.98350132
46	.92551871	.93259329	.94032180	.94841731	.95655247	.96439830	.97166256	.97812075
47	.91957401	.92579637	.93267680	.94060121	.94868386	.95679935	.96482099	.97185841
48	.91456548	.91989724	.92606541	.93315335	.94087613	.94894889	.95704779	.96484787
49	.91050424	.91478437	.92007060	.92632615	.93248330	.93948330	.94714690	.95498866
50	.90733644	.91068547	.91599443	.92030507	.92657885	.93268694	.93941385	.94757564
51	.90495898	.90747986	.91085869	.91519576	.92053086	.92682378	.93394460	.94167730
52	.90224206	.90506752	.90761639	.9102387	.91538844	.92074812	.92706117	.93419654
53	.90048995	.90338065	.90517045	.90774596	.91108101	.91557855	.92095699	.92729121
54	.90125112	.90210341	.90332489	.90526764	.90786848	.91133010	.91574812	.92115761
55	.90073777	.90186726	.90215466	.90346463	.90535898	.90798367	.91147110	.91591521
56	.90041995	.90076072	.90132111	.90202953	.90358974	.90544433	.90809204	.91160397
57	.90023064	.90043391	.90078212	.90135254	.90224690	.90359007	.90533588	.90819289
58	.90012217	.90023877	.90044685	.90080186	.90138144	.90228763	.90364549	.90559660
59	.90006238	.90012670	.90024626	.90045870	.90081984	.90140769	.90232459	.90369586
60	.90003070	.90006480	.90013084	.90025305	.90046938	.90083598	.90143118	.90235767
61	.90001455	.90003193	.90006699	.90013456	.90025911	.90047883	.90085018	.90145161
62	.90000664	.90001515	.90003303	.90006893	.90013783	.90026437	.90048699	.90086238
63	.90000292	.90000692	.90001568	.90003400	.90007061	.90014062	.90026881	.90049380
64	.90000123	.90000304	.90000716	.90001614	.90003482	.90007201	.90014289	.90027238
65	.90000050	.90000128	.90000316	.90000737	.90001652	.90003548	.90007311	.90014464
66	.90000020	.90000052	.90000133	.90000323	.90000753	.90001681	.90003597	.90007389
67	.90000007	.90000020	.90000054	.90000136	.90000330	.90000765	.90001701	.90003629
68	.90000003	.90000008	.90000021	.90000055	.90000139	.90000335	.90000773	.90001712
69	.90000001	.90000003	.90000008	.90000021	.90000056	.90000140	.90000337	.90000774
70		.90000003	.90000008	.90000022	.90000056	.90000141	.90000337	.90000774
71			.90000001	.90000003	.90000008	.90000022	.90000056	.90000140
72				.90000001	.90000003	.90000008	.90000022	.90000056
73					.90000001	.90000003	.90000008	.90000022
74						.90000001	.90000003	.90000008
75							.90000001	.90000003
76								.90000001

x	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	1.00000000	1.00000000
19	1.00000000	1.00000000
20	1.00000000	1.00000000
21	1.00000000	1.00000000
22	1.00000000	1.00000000
23	1.00000000	1.00000000
24	1.00000000	1.00000000
25	.99999999	1.00000000
26	.99999998	.99999999
27	.99999993	.99999998
28	.99999981	.99999993
29	.99999948	.99999980
30	.99999868	.99999946
31	.99999677	.99999864
32	.99999246	.99999670
33	.99998313	.99999234
34	.99996385	.99998295
35	.99992572	.99996362
36	.99985349	.99992552
37	.99978241	.99985354
38	.99949436	.99978321
39	.99911380	.99949683
40	.99850440	.99911955
41	.99785761	.99851589
42	.99618459	.99788832
43	.99488306	.99621904
44	.99349554	.99427639
45	.9904681	.99168778

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

$\frac{c}{n}$	.49	.50
46	.0363443	.0018441
47	.7828917	.0377604
48	.7206083	.7046555
49	.6507940	.7826295
50	.5755041	.6531570
51	.4973797	.5700518
52	.4193755	.5000000
53	.3444308	.4819488
54	.2751418	.3468430
55	.2135007	.2773008
56	.1607381	.2153445
57	.1172866	.1622194
58	.0828638	.1184509
59	.0566725	.0837228
60	.0374106	.0572341
61	.0238874	.0378096
62	.0146949	.0241158
63	.0087249	.0148411
64	.0049281	.0088045
65	.0027505	.0050317
66	.0014583	.0027679
67	.0007435	.0014646
68	.0003643	.0007448
69	.0001713	.0003638
70	.0000773	.0001705
71	.0000336	.0000766
72	.0000139	.0000350
73	.0000055	.0000136
74	.0000021	.0000054
75	.0000008	.0000020
76	.0000003	.0000007
77	.0000001	.0000002
78		.0000001

$$P(a, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 104

	.01	.02	.03	.04	.05	.06	.07	.08
1	.6463308	.8776759	.9879081	.9856713	.9951777	.9983987	.9994725	.9998866
2	.2790235	.6180474	.8824944	.9235800	.9467819	.9677456	.9833438	.9922789
3	.0868780	.3451766	.6068194	.7903486	.8972354	.9573362	.983367	.9913385
4	.0208886	.1558368	.3800270	.6015895	.7698049	.8767585	.9383737	.9708194
5	.0040379	.0588660	.2089185	.4030058	.5990550	.7543049	.8605880	.9287664
6	.0004578	.0184448	.0943659	.2375189	.4199581	.5979813	.7433260	.8474134
7	.0000211	.0080348	.034617	.1237459	.2644331	.4333486	.5977761	.7419938
8	.0000110	.0018888	.0138553	.0513798	.1498183	.3263186	.4444009	.5813353
9	.0000018	.0003847	.0041779	.0238807	.0766824	.1723541	.3044884	.4538887
10	.0000001	.0000483	.0011833	.0094888	.0356236	.0942893	.1920436	.3199984
11		.0000083	.0003033	.0030502	.0150943	.0478196	.1168846	.2094347
12		.0000013	.0000709	.0002909	.0089099	.0218779	.0592978	.1278787
13		.0000002	.0000182	.0000817	.0028947	.0084935	.0286448	.0719094
14			.0000030	.0000717	.0026919	.007637	.0217857	.0578378
15			.0000005	.0000175	.0008180	.003864	.0099881	.0218579
16			.0000001	.0000040	.0000605	.0004760	.0023795	.0085318
17				.0000008	.0000161	.0001887	.0008938	.0036711
18					.0000040	.0000489	.0003149	.001835
19					.0000009	.0000130	.0001043	.0005640
20					.0000002	.0000034	.0000385	.0002028
21						.0000009	.0000096	.0000684
22						.0000002	.0000007	.0000066
23							.0000008	.0000019
24								.0000005
25								.0000001
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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 104

	.17	.18	.19	.20	.21	.22	.23	.24
25	.0418999	.0737192	.1196902	.1809139	.2565722	.3438144	.4381363	.5341448
26	.0245657	.0439464	.0789832	.1259129	.1876221	.2631739	.3497316	.4489290
27	.0137780	.0274225	.0499703	.0841332	.1319316	.1940649	.2694961	.3554068
28	.0073949	.0156757	.0303106	.0539590	.0891651	.1377538	.2002598	.2755619
29	.0037996	.0085846	.0174279	.0332142	.0579022	.0940766	.1433870	.2062829
30	.0018697	.0045053	.0098318	.0196228	.0361233	.0617910	.0998668	.1486389
31	.0008816	.0022664	.0052600	.0111882	.0216499	.0390269	.0656213	.1033358
32	.0003984	.0010936	.0027001	.0060588	.0124660	.0236996	.0419169	.0693854
33	.0001797	.0005062	.0013303	.0031677	.0068967	.0138376	.0257633	.0447836
34	.0000718	.0002249	.0006292	.0015907	.0036667	.0077687	.0152368	.0276331
35	.0000287	.0000959	.0002858	.0007675	.0018737	.0041942	.0086699	.0166558
36	.0000110	.0000393	.0001247	.0003558	.0009205	.0021778	.0047471	.0095955
37	.0000040	.0000155	.0000523	.0001586	.0004348	.0010877	.0025013	.0053285
38	.0000014	.0000058	.0000211	.0000679	.0001975	.0005227	.0012863	.0028846
39	.0000005	.0000021	.0000082	.0000280	.0000863	.0002417	.0006191	.0014618
40	.0000002	.0000007	.0000030	.0000111	.0000363	.0001075	.0002997	.0007839
41		.0000002	.0000011	.0000042	.0000147	.0000461	.0001316	.0003458
42		.0000001	.0000004	.0000016	.0000057	.0000190	.0000573	.0001586
43			.0000001	.0000005	.0000021	.0000075	.0000241	.0000702
44				.0000002	.0000008	.0000029	.0000097	.0000299
45				.0000001	.0000003	.0000011	.0000038	.0000123
46					.0000001	.0000004	.0000014	.0000049
47						.0000001	.0000005	.0000019
48							.0000002	.0000007
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Δx	.41	.42	.43	.44	.45	.46	.47	.48
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
14	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
15	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
16	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
17	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
18	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
19	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
20	.99999999	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
21	.99999981	.99999993	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
22	.99999945	.99999992	.99999992	.99999997	.99999999	1.00000000	1.00000000	1.00000000
23	.99999850	.99999993	.99999976	.99999991	.99999997	.99999999	1.00000000	1.00000000
24	.99999615	.99999936	.99999933	.99999973	.99999990	.99999996	.99999999	1.00000000
25	.99999065	.99999877	.99999824	.99999927	.99999971	.99999994	.99999999	.99999999
26	.99997042	.99999098	.99999550	.99999812	.99999922	.99999969	.99999988	.99999994

$$P(a, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

	.41	.42	.43	.44	.45	.46	.47	.48
27	.9995260	.9997734	.9998955	.9999535	.9999801	.9999918	.9999967	.9999987
28	.9990076	.9995070	.9997637	.9998908	.9999513	.9999791	.9999914	.9999964
29	.9980169	.9987764	.9994901	.9997322	.9998666	.9999494	.9999783	.9999910
30	.9962128	.9976966	.9989497	.9994760	.9997480	.9998638	.9999478	.9999776
31	.9930784	.9961468	.9979302	.9989276	.9994643	.9997421	.9998804	.9999466
32	.9878790	.9929959	.9960944	.9978991	.9989103	.9994582	.9997376	.9998783
33	.9746346	.9877909	.9929349	.9960556	.9978762	.9989777	.9994488	.9997346
34	.9471395	.9795673	.9877347	.9928952	.9960303	.9978616	.9989500	.9994451
35	.9490045	.9671319	.9795427	.9877099	.9928765	.9960185	.9978552	.9989671
36	.9237999	.9491219	.9671027	.9795614	.9877157	.9928783	.9960199	.9978568
37	.8903294	.9241253	.9493114	.9678903	.9796285	.9877514	.9929004	.9960341
38	.8473550	.8908577	.9245338	.9495706	.9674530	.9797848	.9878163	.9929480
39	.7948235	.8483844	.8915772	.9250828	.9498975	.9676698	.9798670	.9879094
40	.7330458	.7963346	.8495030	.8923623	.9255498	.9498900	.9677373	.9798049
41	.6632841	.7350859	.7979252	.8507074	.8938717	.9248237	.9497468	.9682587
42	.5876105	.6658527	.7371883	.7995919	.8519962	.8942431	.9269498	.9512642
43	.5087303	.5906511	.6484597	.7033531	.7513399	.8033676	.8552948	.9077375
44	.4296946	.5121327	.5537023	.6011068	.6415804	.6831622	.7348904	.7864847
45	.3515513	.4333068	.5155171	.5676700	.6137954	.6438708	.6850605	.7363531
46	.2833004	.3571987	.4368746	.5188873	.5998462	.6745275	.7462849	.8070343
47	.2201161	.2845107	.3607815	.4404059	.5222474	.6089487	.6793048	.7486433
48	.1661930	.2233480	.2999431	.3643041	.4438961	.5256010	.6067715	.6881493
49	.1216934	.1690237	.2264837	.2933012	.3677707	.4473588	.5289520	.6021977
50	.0863524	.1240701	.1717718	.2295435	.2965485	.3711852	.4507938	.5323040
51	.0593374	.0882622	.1263706	.1744386	.2325246	.2998064	.3745515	.4542050
52	.0394600	.0608070	.0901058	.1285950	.1770253	.2354292	.3089638	.3778730
53	.0283812	.0405434	.0622220	.0918884	.1307436	.1795331	.2382595	.3060577
54	.0157823	.0261465	.0415838	.0635010	.0935912	.1328163	.1819629	.2410174
55	.0094824	.0163004	.0268796	.0423796	.0648488	.0958313	.1348130	.1843136
56	.0055025	.0098187	.0167953	.0275786	.0435200	.0661882	.0968026	.1347336
57	.0010826	.0057117	.0101389	.0172654	.0282418	.0444303	.0673078	.0983031
58	.0016664	.0032073	.0059102	.0104416	.0177089	.0288675	.0452819	.0684882
59	.0008689	.0017377	.0033251	.0060969	.0107256	.0181246	.0294541	.0460891
60	.0004369	.0009080	.0018047	.0034354	.0062709	.0109896	.0185108	.0300000
61	.0002117	.0004573	.0009444	.0018670	.0035373	.0064312	.0112325	.0188669
62	.0000988	.0002220	.0004763	.0009781	.0019240	.0036308	.0065769	.0114531
63	.0000444	.0001038	.0002314	.0004937	.0009086	.0017754	.0033735	.0067078
64	.0000192	.0000467	.0001083	.0002400	.0005093	.0010357	.0020207	.0037866
65	.0000080	.0000202	.0000487	.0001123	.0002476	.0005228	.0010591	.0020595
66	.0000032	.0000084	.0000211	.0000503	.0001158	.0002540	.0005343	.0010785
67	.0000012	.0000034	.0000088	.0000219	.0000521	.0001187	.0002592	.0005434
68	.0000005	.0000013	.0000035	.0000081	.0000225	.0000533	.0001209	.0002638
69	.0000002	.0000005	.0000013	.0000036	.0000093	.0000230	.0000548	.0001283
70	.0000001	.0000002	.0000005	.0000014	.0000037	.0000095	.0000233	.0000547
71		.0000001	.0000002	.0000005	.0000014	.0000038	.0000096	.0000235
72			.0000001	.0000002	.0000005	.0000014	.0000038	.0000096
73				.0000001	.0000002	.0000005	.0000014	.0000038
74					.0000001	.0000002	.0000005	.0000014
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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 104

λ	.49	.50
43	.9818421	.9690368
44	.9925936	.9584788
45	.9976315	.9495819
46	.9996449	.9418913
47	.9999634	.9349448
48	.9999978	.9289990
49	.9999999	.9234775
50	.9999999	.9183988
51	.9999999	.9136041
52	.9999999	.9090286
53	.9999999	.9045744
54	.9999999	.9002599
55	.9999999	.8960718
56	.9999999	.8919985
57	.9999999	.8879920
58	.9999999	.8839948
59	.9999999	.8799966
60	.9999999	.8759981
61	.9999999	.8719988
62	.9999999	.8679988
63	.9999999	.8639980
64	.9999999	.8599972
65	.9999999	.8559964
66	.9999999	.8519956
67	.9999999	.8479948
68	.9999999	.8439940
69	.9999999	.8399932
70	.9999999	.8359924
71	.9999999	.8319916
72	.9999999	.8279908
73	.9999999	.8239900
74	.9999999	.8199892
75	.9999999	.8159884
76	.9999999	.8119876
77	.9999999	.8079868
78	.9999999	.8039860
79	.9999999	.8000000

$$P(n, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

	.01	.02	.03	.04	.05	.06	.07	.08
1	.4513049	.8001324	.9591650	.9862444	.9954108	.9984919	.9995094	.9998483
2	.8887172	.6938419	.4865567	.3260637	.2070107	.1263846	.0756323	.0408086
3	.0887994	.3506340	.6132896	.7956721	.9008187	.9548368	.9804571	.9918936
4	.0215485	.1596230	.3868308	.6091376	.7756064	.8813171	.9412411	.9784609
5	.0042268	.0402174	.2082318	.4109489	.6075643	.7616523	.8659717	.9289370
6	.0006918	.01922407	.0966535	.2441364	.4287131	.6073607	.7815897	.8536816
7	.0000968	.0053094	.0391389	.1260978	.2781998	.4432209	.6079646	.7439874
8	.0000118	.0018794	.0139815	.0600345	.1555486	.2950461	.4551371	.6090839
9	.0000013	.0002736	.0044803	.0251948	.0803398	.1791860	.3148837	.4633824
10	.0000001	.0000534	.0018792	.0095449	.0376746	.0974808	.1999104	.3307037
11		.0000091	.0003889	.0028861	.0141207	.0366403	.0773098	.1168298
12		.0000014	.0000779	.0004339	.0023264	.0087144	.0219568	.0433849
13		.0000002	.0000149	.0000898	.0002830	.0010934	.0031956	.0074388
14			.0000034	.0000297	.0000944	.0002475	.0006099	.0014885
15			.0000006	.0000157	.0000360	.0001381	.0004701	.0011196
16			.0000001	.0000045	.0000183	.0000530	.0001627	.0003330
17				.0000002	.0000018	.0000053	.0000154	.0000399
18					.0000004	.0000011	.0000034	.0000085
19					.0000001	.0000004	.0000011	.0000031
20						.0000000	.0000000	.0000000
21					.0000001	.0000001	.0000001	.0000001
22						.0000000	.0000000	.0000000
23						.0000000	.0000000	.0000000
24						.0000000	.0000000	.0000000
25						.0000000	.0000000	.0000000
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$$P(n, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 105

	.17	.18	.19	.20	.21	.22	.23	.24
25	.0463960	.0480360	.0499941	.0519664	.0539542	.0559575	.0579768	.0599920
26	.0875125	.0899455	.0924175	.0949211	.0974594	.0999348	.1024387	.1049620
27	.0186119	.0307568	.0554828	.0924891	.1436266	.2092698	.2877503	.3764121
28	.0004000	.0177901	.0340455	.0599930	.0941461	.1501422	.241841	.3747847
29	.0044108	.0098610	.0200375	.0373632	.0644674	.1036856	.1567878	.2288643
30	.0081078	.0083996	.0113130	.0234111	.0406949	.0688945	.1091065	.1626111
31	.0010496	.0086696	.0061807	.0128871	.0246894	.0440352	.0738877	.1144056
32	.0004006	.0011048	.0031865	.0070727	.0143946	.0270716	.0473584	.0775815
33	.0000111	.0005119	.0013906	.0037459	.0080663	.0160073	.0324785	.0590800
34	.0000890	.0008755	.0007624	.0019061	.0043450	.0091039	.0176574	.0319012
35	.0000380	.0001191	.0003511	.0009381	.0022502	.0049806	.0101801	.0193379
36	.0000140	.0000495	.0001353	.0004381	.0011206	.0026814	.0066494	.0112898
37	.0000052	.0000197	.0000661	.0001980	.0005349	.0013875	.0030179	.0063480
38	.0000019	.0000076	.0000270	.0000861	.0002474	.0006470	.0015520	.0034376
39	.0000006	.0000028	.0000106	.0000360	.0001047	.0003035	.0007585	.0017932
40	.0000002	.0000010	.0000040	.0000145	.0000440	.0001370	.0003664	.0009010
41	.0000001	.0000003	.0000015	.0000054	.0000192	.0000596	.0001683	.0004361
42		.0000001	.0000005	.0000021	.0000076	.0000249	.0000744	.0002034
43			.0000002	.0000007	.0000029	.0000101	.0000317	.0000914
44			.0000001	.0000003	.0000011	.0000039	.0000130	.0000396
45				.0000001	.0000004	.0000015	.0000051	.0000165
46					.0000001	.0000005	.0000020	.0000066
47						.0000002	.0000007	.0000026
48						.0000001	.0000003	.0000010
49							.0000001	.0000003
50								.0000001

	.25	.26	.27	.28	.29	.30	.31	.32
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
10	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000
11	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000
12	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000
13	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
14	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
15	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
16	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
17	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
18	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
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22	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
23	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
24	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
25	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
26	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
27	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
28	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
29	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
30	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
31	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
32	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
33	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
34	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
35	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
36	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
37	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
38	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
39	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
40	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
41	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
42	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
43	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
44	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
45	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
46	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
47	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
48	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
49	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
50	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
51	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
52	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
53	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
54	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
55	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
56	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
57	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
58	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
59	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
60	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999

	.33	.34	.35	.36	.37	.38	.39	.40
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000

$$P(\epsilon, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 105

ϵ	.41	.42	.43	.44	.45	.46	.47	.48
27	.9996319	.9998269	.9999215	.9999657	.9999855	.9999941	.9999977	.9999991
28	.9998202	.9999189	.9999604	.9999843	.9999943	.9999979	.9999993	.9999997
29	.9999231	.9999653	.9999870	.9999940	.9999961	.9999974	.9999984	.9999987
30	.9999825	.9999924	.9999962	.9999980	.9999991	.9999996	.9999998	.9999999
31	.9943635	.9969123	.9983686	.9991689	.9995919	.9998070	.9999121	.9999615
32	.9900108	.9945193	.9968838	.9983511	.9991596	.9995872	.9998047	.9999111
33	.9830160	.9899770	.9942935	.9964667	.9983416	.9991548	.9995846	.9998036
34	.9728633	.9830212	.9899708	.9942858	.9964610	.9983182	.9991526	.9995841
35	.9564399	.9728548	.9830653	.9899914	.9942957	.9964663	.9983116	.9991549
36	.9341338	.9566861	.9724975	.9831467	.9900360	.9943228	.9968825	.9983514
37	.9039933	.9346239	.9569960	.9726896	.9832644	.9901098	.9943665	.9969050
38	.8649335	.9048307	.9351882	.9573673	.9729293	.9834170	.9902058	.9944282
39	.8163614	.8662238	.9057485	.9352838	.9577975	.9732148	.9836031	.9903251
40	.7583746	.8181957	.8675949	.9067441	.9365863	.9582845	.9735443	.9838215
41	.6918864	.7608104	.8201036	.8699044	.9078148	.9372990	.9588260	.9739160
42	.6196367	.6949307	.7633052	.8228839	.8705701	.9089583	.9381338	.9594201
43	.5410712	.6222358	.6980130	.7654590	.8241352	.8721704	.9101724	.9390303
44	.4620993	.5451104	.6258480	.7011351	.7684722	.8262567	.8738432	.9114549
45	.3847701	.4664136	.5491367	.6294765	.7042987	.7711449	.8284476	.8755875
46	.3119253	.3891640	.4706908	.5531544	.6331244	.7075054	.7738776	.8307073
47	.2458998	.3161997	.3935015	.4749361	.5571677	.6367949	.7107572	.7666710
48	.1883023	.2498733	.3204036	.3977876	.4791543	.5611809	.6340491	.7140560
49	.1392387	.1918377	.2537712	.3245425	.4020271	.4833499	.5651982	.6442163
50	.1008432	.1429506	.1952979	.2575969	.3286205	.4062246	.4875278	.5692235
51	.0704135	.1033015	.1458931	.1986847	.2613534	.3326417	.4103851	.4916925
52	.0476097	.0723332	.1056996	.1487662	.2020000	.2650436	.3366100	.4145124
53	.0311535	.0490541	.0742120	.1080359	.1515704	.2052453	.2686705	.3405890
54	.0197179	.0321932	.0504582	.0760336	.1103098	.1543060	.2084223	.2729367
55	.0120654	.0204358	.0332024	.0518202	.0776014	.1125204	.1569735	.2115324
56	.0071343	.0125410	.0211316	.0341790	.0531361	.0795140	.1146672	.1595730
57	.0040747	.0074366	.0130011	.0218032	.0351210	.0544099	.0811699	.1167492
58	.0022470	.0042591	.0077285	.0134440	.0224487	.0360264	.0536340	.0827676
59	.0011959	.0023549	.0044367	.0080886	.0138681	.0230663	.0366932	.0558082
60	.0006140	.0012564	.0024585	.0046064	.0082755	.0142717	.0236842	.0377194
61	.0003040	.0006466	.0013144	.0025577	.0047674	.0085381	.0146533	.0242104
62	.0001451	.0003208	.0006776	.0013692	.0026500	.0049187	.0087650	.0150114
63	.0000667	.0001534	.0003367	.0007068	.0014206	.0027366	.0050523	.0089852
64	.0000296	.0000707	.0001612	.0003316	.0007340	.0014680	.0028164	.0051885
65	.0000126	.0000313	.0000743	.0001685	.0003653	.0007587	.0015111	.0028885
66	.0000052	.0000134	.0000330	.0000777	.0001751	.0003777	.0007809	.0015424
67	.0000020	.0000055	.0000141	.0000345	.0000807	.0001809	.0003885	.0008002
68	.0000008	.0000022	.0000058	.0000147	.0000358	.0000834	.0001859	.0003977
69	.0000003	.0000008	.0000023	.0000060	.0000153	.0000369	.0000856	.0001901
70	.0000001	.0000003	.0000009	.0000024	.0000062	.0000157	.0000378	.0000873
71		.0000001	.0000003	.0000009	.0000025	.0000064	.0000161	.0000385
72			.0000001	.0000003	.0000009	.0000025	.0000065	.0000163
73				.0000001	.0000003	.0000009	.0000026	.0000166
74					.0000001	.0000003	.0000009	.0000168
75						.0000001	.0000003	.0000170
76							.0000001	.0000003
77								.0000001

ϵ	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
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15	1.0000000	1.0000000
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17	1.0000000	1.0000000
18	1.0000000	1.0000000
19	1.0000000	1.0000000
20	1.0000000	1.0000000
21	1.0000000	1.0000000
22	1.0000000	1.0000000
23	1.0000000	1.0000000
24	1.0000000	1.0000000
25	1.0000000	1.0000000
26	.9999999	1.0000000
27	.9999997	.9999999
28	.9999991	.9999997
29	.9999978	.9999991
30	.9999938	.9999978
31	.9999838	.9999934
32	.9999611	.9999838
33	.9999107	.9999611
34	.9998038	.9999107
35	.9996857	.9998038
36	.9994609	.9996857
37	.9991674	.9994609
38	.9987457	.9991674
39	.9981013	.9987457
40	.9972667	.9981013
41	.9962704	.9972667
42	.9951281	.9962704

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

x	.49	.50
43	.9600646	.9747789
44	.9399864	.9607575
45	.9128039	.9410000
46	.8774015	.9142177
47	.8350354	.8792841
48	.7795257	.8354314
49	.7174039	.7824428
50	.6479735	.7208029
51	.5732611	.6517662
52	.4980485	.5773148
53	.4186110	.5000000
54	.3444025	.4226852
55	.2757448	.3482338
56	.2145770	.2791971
57	.1621047	.2175572
58	.1187658	.1645686
59	.0843086	.1207159
60	.0579309	.0857823
61	.0385032	.0590000
62	.0247313	.0392425
63	.0153444	.0252211
64	.0091874	.0156509
65	.0053053	.0093705
66	.0029526	.0054070
67	.0015827	.0030080
68	.0008165	.0016105
69	.0004051	.0008295
70	.0001932	.0004107
71	.0000885	.0001953
72	.0000389	.0000892
73	.0000164	.0000390
74	.0000064	.0000164
75	.0000026	.0000066
76	.0000009	.0000025
77	.0000003	.0000009
78	.0000001	.0000003
79		.0000001

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 106

	.01	.02	.03	.04	.05	.06	.07	.08
1	.4553878	.8885800	.9603901	.9867946	.9956479	.9988824	.9998438	.9999855
2	.2864091	.5283795	.8305349	.9284709	.9713675	.9888910	.9959037	.9988180
3	.0907386	.3560862	.6196876	.8008877	.9042772	.9568496	.9815194	.9924145
4	.0222210	.1634433	.3936245	.6166009	.7818667	.8857283	.9439862	.9740155
5	.0043995	.0622074	.2135898	.4188765	.6159683	.7688321	.8718405	.9388178
6	.0007272	.0200603	.1000008	.2508108	.4378458	.6166182	.7595407	.8597367
7	.0001027	.0055812	.0408643	.1329314	.2800355	.4830693	.6180141	.7587629
8	.0000186	.0013598	.0147362	.0627651	.1613811	.3039366	.4658350	.6198768
9	.0000014	.0000937	.0047362	.0265855	.0840997	.1861376	.3240876	.4768786
10	.0000001	.0000568	.0013685	.0101708	.0398097	.1042631	.2079123	.3414798
11		.0000099	.0003589	.0035365	.0171985	.0535706	.1230918	.2278739
12		.0000016	.0000855	.0011240	.0068125	.0253318	.0673740	.1406038
13		.0000008	.0000187	.0003282	.0024850	.0110622	.0341729	.0809396
14			.0000038	.0000885	.0008381	.0044763	.0161032	.0434250
15			.0000007	.0000282	.0002623	.0016838	.0070683	.0217551
16			.0000001	.0000051	.0000764	.0005905	.0028974	.0101978
17				.0000011	.0000208	.0001936	.0011119	.0044820
18				.0000002	.0000053	.0000595	.0004004	.0018506
19					.0000013	.0000172	.0001356	.0007193
20					.0000003	.0000047	.0000433	.0002636
21						.0000001	.0000013	.00000913
22							.0000003	.00000299
23							.0000001	.00000093
24								.0000003
25								.00000008
26								.00000002
27								.00000001
28								
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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 106

	.17	.18	.19	.20	.21	.22	.23	.24
23	.1248662	.1216321	.2739356	.3679367	.4680076	.5670153	.6614846	.7445145
24	.0817641	.1329495	.2004367	.2826560	.3757963	.4744328	.5785313	.6645166
25	.0812334	.0864008	.1408133	.2089237	.2910261	.3833450	.4806417	.5771505
26	.0307227	.0563258	.0949401	.1484633	.2171151	.2990770	.3906138	.4866576
27	.0176350	.0343908	.0614174	.1013739	.1559064	.2250310	.3068366	.3976302
28	.0096984	.0201241	.0381185	.0664929	.1076970	.1631501	.2328903	.3143297
29	.0051025	.0112882	.0226590	.0418893	.0715399	.1139061	.1702025	.2401108
30	.0025740	.0060714	.0129707	.0253455	.0456887	.0765485	.1199996	.1770719
31	.0012448	.0031322	.0071137	.0147299	.0280509	.0495042	.0815107	.1259772
32	.0005773	.0015504	.0037453	.0082236	.0165365	.0300036	.0533352	.0864200
33	.0002569	.0007366	.0018338	.0044113	.0093952	.0184414	.0335931	.0571425
34	.0001097	.0003361	.0009198	.0022741	.0051265	.0106226	.0203763	.0364101
35	.0000450	.0001473	.0004392	.0011269	.0026901	.0058877	.0116999	.0223531
36	.0000177	.0000610	.0001925	.0005359	.0013579	.0031404	.0066915	.0132214
37	.0000067	.0000251	.0000834	.0002460	.0006594	.0016122	.0036231	.0075341
38	.0000024	.0000098	.0000344	.0001085	.0003081	.0007967	.0018898	.0041362
39	.0000009	.0000037	.0000137	.0000460	.0001366	.0003790	.0009467	.0021879
40	.0000003	.0000013	.0000053	.0000188	.0000600	.0001737	.0004589	.0011151
41	.0000001	.0000005	.0000019	.0000074	.0000250	.0000766	.0002138	.0006477
42		.0000002	.0000007	.0000028	.0000100	.0000326	.0000960	.0002592
43			.0000003	.0000010	.0000039	.0000133	.0000415	.0001183
44			.0000001	.0000004	.0000014	.0000053	.0000173	.0000520
45				.0000001	.0000005	.0000020	.0000070	.0000220
46					.0000002	.0000007	.0000027	.0000090
47					.0000001	.0000003	.0000010	.0000035
48						.0000001	.0000004	.0000013
49							.0000001	.0000005
50								.0000002
51								.0000001
25	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
26	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
27	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
28	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
29	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
30	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
31	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
32	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
33	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
34	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
35	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
36	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
37	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
38	.99999998	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
39	.99999996	.99999998	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
40	.99999991	.99999991	.99999992	.99999993	.99999993	.99999999	1.00000000	1.00000000
41	.99999953	.99999925	.99999932	.99999974	.99999991	.99999997	.99999999	1.00000000
42	.99999867	.99999840	.99999872	.99999910	.99999966	.99999987	.99999995	.99999998
43	.99999633	.99999608	.99999630	.99999712	.99999884	.99999955	.99999983	.99999994
44	.99999606	.99999586	.99999648	.99999753	.99999844	.99999955	.99999993	.99999997
45	.99979990	.99989992	.99994996	.99997712	.99998994	.99999572	.99999824	.99999930
46	.9952198	.9975598	.9987973	.9994272	.9997163	.9998626	.9999494	.9999759
47	.9903300	.9948235	.9973263	.9986666	.9993576	.9997008	.9998653	.9999413
48	.9817010	.9897338	.9944459	.9971005	.9985386	.9992884	.9996652	.9998477
49	.9674790	.9808916	.9891784	.9940893	.9968845	.9984146	.9992207	.9996299
50	.9455224	.9665027	.9801549	.9886654	.9937555	.9966729	.9982957	.9991551
51	.9136853	.9445109	.9656369	.9794901	.9881959	.9934461	.9964881	.9981832
52	.8702251	.9128677	.9436468	.9648776	.9788963	.9877703	.9931621	.9963101
53	.8142536	.8699122	.9128227	.9429219	.9642207	.9783721	.9873889	.9929046
54	.7461144	.8147919	.8697748	.9127385	.9423285	.9636619	.9779159	.9870315
55	.6675651	.7478158	.8154794	.8697997	.9114045	.9418594	.9631974	.9775260
56	.5816845	.6706303	.7496108	.8163044	.8699751	.9112111	.9415078	.9628831
57	.4925008	.5861435	.6737127	.7514928	.8172570	.8702907	.9111496	.9412676
58	.4044182	.4981893	.5905367	.6768128	.7534562	.8183283	.8707373	.9112121
59	.3215785	.4109992	.5037391	.5948722	.6799313	.7554962	.8195106	.8717065
60	.2473085	.3286033	.4173924	.5091643	.5991574	.6830690	.7576066	.8207972
61	.1837663	.2542995	.3354223	.4236150	.5144776	.6033991	.6862266	.7597898
62	.1318394	.1902941	.2610949	.3420519	.4296824	.5196907	.6076034	.6894056
63	.0912715	.1375877	.1966660	.2677106	.3485073	.4356085	.5246138	.6117760
64	.0609481	.0960615	.1432239	.2028809	.2741575	.3548023	.4414062	.5298566
65	.0399460	.0647353	.1007869	.1487502	.2089551	.2804470	.3609494	.4470869
66	.0243645	.0428933	.0684983	.1054457	.1541694	.2148929	.2865894	.3659603
67	.0145814	.0264037	.0449453	.0722322	.1100364	.1594841	.2207011	.2925944
68	.0084118	.0159745	.0284643	.0477959	.0759389	.1145581	.1646974	.2263863
69	.0046676	.0093209	.0173957	.0305404	.0506397	.0799568	.1190101	.1698128
70	.0025073	.0052448	.0102957	.0188401	.0326266	.0534719	.0832809	.1233924
71	.0012953	.0028460	.0058356	.0112188	.0203029	.0347180	.0562882	.0868026
72	.0006453	.0014893	.0032027	.0064475	.0121929	.0217797	.0368099	.0590448
73	.0003099	.0007515	.0016957	.0033759	.0070779	.0131982	.0232664	.0388981
74	.0001435	.0003657	.0008460	.0017139	.0035640	.0077243	.0142101	.0247591
75	.0000640	.0001716	.0004267	.0009884	.0021429	.0043653	.0083643	.0158323
76	.0000376	.0000977	.0002308	.0004923	.0011181	.0023819	.0047782	.0090554
77	.0000114	.0000359	.0000930	.0002368	.0005631	.0012547	.0026297	.0052808
78	.0000046	.0000143	.0000361	.0000938	.0002376	.0005630	.00113975	.0023438
79	.0000018	.0000058	.0000175	.0000442	.0001183	.0003131	.0007170	.0015457
80	.0000007	.0000023	.0000072	.0000212	.0000581	.0001483	.0003551	.0007996
81	.0000002	.0000009	.0000029	.0000088	.0000253	.0000678	.0001697	.0003994
82	.0000001	.0000003	.0000011	.0000036	.0000107	.0000297	.0000763	.0001825
83		.0000001	.0000004	.0000014	.0000043	.0000127	.0000348	.0000926
84			.0000001	.0000005	.0000017	.0000052	.0000150	.0000438
85				.0000002	.0000006	.0000021	.0000062	.0000174
86				.0000001	.0000003	.0000010	.0000035	.0000103
87					.0000001	.0000004	.0000016	.0000048
88						.0000001	.0000004	.0000011
89							.0000001	.0000002
90								.0000001
91								.0000001

$$H(x, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 106

x	.41	.42	.43	.44	.45	.46	.47	.48
24	.0000784	.0000911	.0000965	.0000987	.0000995	.0000999	.0000999	1.0000000
25	.0000463	.0000770	.0000905	.0000962	.0000986	.0000995	.0000999	.0000999
26	.0000732	.0000456	.0000758	.0000900	.0000960	.0000985	.0000994	.0000998
27	.0000714	.0000281	.0000413	.0000747	.0000945	.0000975	.0000984	.0000994
28	.0000380	.0000063	.0000849	.0000322	.0000738	.0000982	.0000957	.0000983
29	.0000749	.0000755	.0000692	.0000604	.0000376	.0000731	.0000989	.0000954
30	.0000554	.0000713	.0000652	.0000639	.0000578	.0000364	.0000726	.0000987
31	.0000425	.0000340	.0000714	.0000358	.0000902	.0000561	.0000356	.0000972
32	.0000744	.0000408	.0000523	.0000713	.0000988	.0000683	.0000552	.0000953
33	.0000846	.0000808	.0000407	.0000520	.0000987	.0000353	.0000680	.0000852
34	.0000719	.0000427	.0000296	.0000421	.0000522	.0000713	.0000356	.0000684
35	.0000427	.0000347	.0000346	.0000809	.0000501	.0000543	.0000728	.0000360
36	.0000274	.0000270	.0000416	.0000158	.0000540	.0000428	.0000682	.0000737
37	.0000350	.0000890	.0000617	.0000297	.0000126	.0000478	.0000549	.0000760
38	.0000486	.0000438	.0000455	.0000401	.0000301	.0000495	.0000163	.0000561
39	.0000270	.0000407	.0000476	.0000502	.0000068	.0000907	.0000180	.0000236
40	.0000142	.0000375	.0000400	.0000392	.0000994	.0000152	.0000270	.0000432
41	.0000146	.0000122	.0000249	.0000322	.0000389	.0000523	.0000743	.0000670
42	.0000691	.0000001	.0000728	.0000465	.0000303	.0000951	.0000852	.0000378
43	.0000730	.0000276	.0000086	.0000980	.0000309	.0000928	.0000314	.0000817
44	.0000477	.0000031	.0000990	.0000136	.0000205	.0000770	.0000180	.0000918
45	.0000475	.0000463	.0000122	.0000063	.0000176	.0000496	.0000783	.0000280
46	.0000722	.0000008	.0000226	.0000361	.0000528	.0000796	.0000525	.0000249
47	.0000707	.0000447	.0000692	.0000521	.0000402	.0000321	.0000423	.0000608
48	.0000173	.0000730	.0000357	.0000173	.0000403	.0000963	.0000162	.0000411
49	.0000795	.0000127	.0000231	.0000703	.0000343	.0000152	.0000585	.0000739
50	.0000716	.0000432	.0000414	.0000529	.0000535	.0000702	.0000329	.0000220
51	.0000883	.0000541	.0000137	.0000406	.0000162	.0000489	.0000422	.0000907
52	.0000693	.0000342	.0000982	.0000703	.0000709	.0000138	.0000184	.0000589
53	.0000906	.0000834	.0000757	.0000578	.0000437	.0000525	.0000602	.0000411
54	.0000406	.0000274	.0000674	.0000146	.0000770	.0000738	.0000390	.0000170
55	.0000502	.0000373	.0000424	.0000471	.0000430	.0000741	.0000154	.0000670
56	.0000160	.0000560	.0000320	.0000191	.0000436	.0000970	.0000551	.0000453
57	.0000320	.0000580	.0000492	.0000248	.0000328	.0000578	.0000913	.0000304
58	.0000964	.0000537	.0000957	.0000122	.0000512	.0000482	.0000635	.0000788
59	.0000163	.0000154	.0000157	.0000402	.0000729	.0000279	.0000701	.0000268
60	.0000856	.0000177	.0000309	.0000103	.0000792	.0000317	.0000676	.0000821
61	.0000431	.0000927	.0000863	.0000458	.0000460	.0000170	.0000883	.0000648
62	.0000183	.0000575	.0000914	.0000191	.0000608	.0000579	.0000132	.0000269
63	.0000389	.0000217	.0000483	.0000983	.0000738	.0000343	.0000201	.0000178
64	.0000196	.0000478	.0000117	.0000249	.0000312	.0000516	.0000705	.0000109
65	.0000196	.0000478	.0000117	.0000249	.0000312	.0000516	.0000705	.0000109
66	.0000082	.0000009	.0000050	.0000117	.0000267	.0000530	.0000124	.0000192
67	.0000033	.0000088	.0000022	.0000053	.0000123	.0000271	.0000572	.0000159
68	.0000013	.0000016	.0000003	.0000023	.0000056	.0000128	.0000281	.0000590
69	.0000005	.0000014	.0000003	.0000009	.0000024	.0000058	.0000132	.0000287
70	.0000002	.0000005	.0000001	.0000004	.0000013	.0000025	.0000063	.0000156
71	.0000001	.0000002	.0000005	.0000015	.0000042	.0000107	.0000026	.0000061
72	.0000001	.0000001	.0000002	.0000006	.0000016	.0000041	.0000010	.0000026
73	.0000001	.0000001	.0000001	.0000002	.0000006	.0000017	.0000004	.0000013
74	.0000001	.0000001	.0000001	.0000002	.0000006	.0000017	.0000004	.0000013
75	.0000001	.0000001	.0000001	.0000002	.0000006	.0000017	.0000004	.0000013
76	.0000001	.0000001	.0000001	.0000002	.0000006	.0000017	.0000004	.0000013
77	.0000001	.0000001	.0000001	.0000002	.0000006	.0000017	.0000004	.0000013
78	.0000001	.0000001	.0000001	.0000002	.0000006	.0000017	.0000004	.0000013

x	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	1.0000000	1.0000000
8	1.0000000	1.0000000
9	1.0000000	1.0000000
10	1.0000000	1.0000000
11	1.0000000	1.0000000
12	1.0000000	1.0000000
13	1.0000000	1.0000000
14	1.0000000	1.0000000
15	1.0000000	1.0000000
16	1.0000000	1.0000000
17	1.0000000	1.0000000
18	1.0000000	1.0000000
19	1.0000000	1.0000000
20	1.0000000	1.0000000
21	1.0000000	1.0000000
22	1.0000000	1.0000000
23	1.0000000	1.0000000
24	1.0000000	1.0000000
25	1.0000000	1.0000000
26	.9999999	1.0000000
27	.9999999	.9999999
28	.9999999	.9999999
29	.9999999	.9999999
30	.9999999	.9999999
31	.9999999	.9999999
32	.9999999	.9999999
33	.9999999	.9999999
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35	.9999999	.9999999
36	.9999999	.9999999
37	.9999999	.9999999
38	.9999999	.9999999

AMCP 706-109

$$P(x; n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 106

x	.49	.50
39	.9956991	.9976907
40	.9924436	.9957915
41	.9872047	.9926103
42	.9791019	.9874893
43	.9670537	.9795640
44	.9498247	.9677682
45	.9261233	.9508787
46	.8947487	.9276088
47	.8547748	.8967509
48	.8057455	.8573578
49	.7478436	.8089371
50	.6819944	.7516228
51	.6098702	.6062845
52	.5337806	.6145405
53	.4564574	.5386574
54	.3807647	.4613426
55	.3093871	.3854595
56	.2445492	.3137155
57	.1878161	.2483772
58	.1400018	.1910629
59	.1011911	.1426422
60	.0708545	.1032491
61	.0480228	.0723912
62	.0314806	.0491213
63	.0199450	.0322316
64	.0122043	.0204360
65	.0072075	.0125107
66	.0041054	.0073897
67	.0022539	.0042085
68	.0011919	.0023093
69	.0006067	.0012200
70	.0002971	.0006201
71	.0001398	.0003030
72	.0000632	.0001423
73	.0000274	.0000641
74	.0000114	.0000277
75	.0000045	.0000115
76	.0000017	.0000046
77	.0000006	.0000017
78	.0000002	.0000006
79	.0000001	.0000002
80		.0000001

$$P(n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 107

	.01	.02	.03	.04	.05	.06	.07	.08
1	.6588339	.8848696	.9615784	.9871228	.9958655	.9996675	.9999757	.9999866
2	.2900989	.6334623	.8144306	.9308038	.9725816	.9895665	.9961585	.9986250
3	.0928953	.3615320	.6260131	.8059510	.9076317	.9507781	.9823863	.9929028
4	.0229061	.1672961	.4004064	.6829724	.8779872	.9599956	.9846613	.9954874
5	.0045777	.0642328	.2189908	.4267055	.6242632	.7758458	.8761327	.9316137
6	.0007639	.0209032	.1034085	.2575334	.4467519	.6257511	.7673596	.8655832
7	.0001090	.0058707	.0426384	.1376466	.2879260	.4626823	.6279210	.7613208
8	.0000135	.0014443	.0155201	.0655717	.1673138	.3128845	.4764076	.6305071
9	.0000015	.0003151	.0080362	.0280327	.0879637	.1932055	.3340099	.4883184
10	.0000001	.0000616	.0014695	.0108274	.0420242	.1091756	.2160446	.3523117
11		.0000109	.0003885	.0038018	.0183291	.0566121	.1290292	.2364104
12		.0000017	.0000937	.0012205	.0073318	.0270262	.0712742	.1475374
13		.0000003	.0000207	.0003600	.0027014	.0119184	.0364970	.0857128
14			.0000042	.0000980	.0009205	.0048714	.0173481	.0464262
15			.0000008	.0000247	.0002811	.0018513	.0077008	.0234887
16			.0000001	.0000058	.0000857	.0006561	.0031094	.0111224
17				.0000013	.0000236	.0002174	.0012769	.0049392
18				.0000003	.0000061	.0000676	.0004502	.0026011
19				.0000001	.0000015	.0000197	.0001541	.0008098
20					.0000003	.0000054	.0000497	.0003001
21					.0000001	.0000014	.0000151	.0001051
22						.0000003	.0000044	.0000348
23						.0000001	.0000012	.0000109
24							.0000003	.0000033
25							.0000001	.0000009
26								.0000002
27								.0000001
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$$F(x, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 107

x	.17	.18	.19	.20	.21	.22	.23	.24
23	.1346617	.2048077	.2902367	.3866173	.4879538	.5877592	.6802390	.7611617
24	.0890914	.1435123	.2144015	.2997121	.3951607	.4949770	.5929906	.6837161
25	.0564236	.0964196	.1521417	.2236702	.3088270	.4033843	.5017763	.5981184
26	.0343098	.0680993	.1036560	.1605554	.2326364	.3176160	.4113808	.5083759
27	.0190599	.0381391	.0677867	.1107918	.1687602	.2413211	.3261054	.4189960
28	.0110486	.0220972	.0425453	.0734691	.1178209	.1767639	.2497440	.3343218
29	.0058828	.0117657	.0235314	.0460100	.0791329	.1247398	.1845747	.2579233
30	.0030039	.0060078	.0119156	.0238312	.0456624	.0785092	.1234726	.1815463
31	.0014707	.0029414	.0058828	.0117657	.0235314	.0456624	.0785092	.1234726
32	.0006908	.0013816	.0027632	.0055264	.0110528	.0221056	.0442112	.0884224
33	.0003113	.0006226	.0012452	.0024904	.0049808	.0099616	.0199232	.0398464
34	.0001347	.0002694	.0005388	.0010776	.0021552	.0043104	.0086208	.0172416
35	.0000560	.0001120	.0002240	.0004480	.0008960	.0017920	.0035840	.0071680
36	.0000224	.0000448	.0000896	.0001792	.0003584	.0007168	.0014336	.0028672
37	.0000086	.0000172	.0000344	.0000688	.0001376	.0002752	.0005504	.0011008
38	.0000032	.0000064	.0000128	.0000256	.0000512	.0001024	.0002048	.0004096
39	.0000011	.0000022	.0000044	.0000088	.0000176	.0000352	.0000704	.0001408
40	.0000004	.0000008	.0000016	.0000032	.0000064	.0000128	.0000256	.0000512
41	.0000001	.0000002	.0000004	.0000008	.0000016	.0000032	.0000064	.0000128
42		.0000001	.0000002	.0000004	.0000008	.0000016	.0000032	.0000064
43		.0000001	.0000002	.0000004	.0000008	.0000016	.0000032	.0000064
44			.0000001	.0000002	.0000004	.0000008	.0000016	.0000032
45				.0000001	.0000002	.0000004	.0000008	.0000016
46					.0000001	.0000002	.0000004	.0000008
47						.0000001	.0000002	.0000004
48							.0000001	.0000002
49								.0000001
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AMCP 706-109

$$P(n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 107

x	.41	.42	.43	.44	.45	.46	.47	.48
24	.9999839	.9999935	.9999975	.9999990	.9999997	.9999999	1.0000000	1.0000000
25	.9999595	.9999830	.9999931	.9999973	.9999990	.9999996	.9999999	1.0000000
26	.9999032	.9999576	.9999821	.9999927	.9999972	.9999989	.9999996	.9999999
27	.9997798	.9998998	.9999561	.9999814	.9999925	.9999970	.9999989	.9999996
28	.9995226	.9997742	.9998971	.9999548	.9999809	.9999928	.9999970	.9999989
29	.9990119	.9995144	.9997700	.9998951	.9999519	.9999805	.9999921	.9999969
30	.9980452	.9990019	.9995088	.9997671	.9998937	.9999533	.9999802	.9999920
31	.9968965	.9980369	.9992655	.9995058	.9997656	.9998930	.9999530	.9999802
32	.9953885	.9963011	.9976036	.9989959	.9995054	.9997655	.9998930	.9999531
33	.9933076	.9933160	.9953167	.9968044	.9989967	.9995074	.9997664	.9998936
34	.9904488	.9904031	.9933680	.9953448	.9968053	.9989907	.9995119	.9997690
35	.9865627	.9866600	.9905265	.9934387	.9953648	.9968017	.9989082	.9995166
36	.9813351	.9869654	.9899086	.9906763	.9935272	.9964361	.9981109	.9990365
37	.9739195	.9808883	.9894150	.9811925	.9888512	.9936325	.9964980	.9981465
38	.964632	.9804932	.9827769	.9899090	.9815067	.9890456	.9937535	.9965700
39	.9545618	.9798889	.9826555	.9835776	.9704448	.9818552	.9892702	.9938093
40	.943412	.9786774	.9827958	.9708752	.9544277	.9710152	.9823361	.9895114
41	.9324182	.976634	.9822196	.9605513	.9321495	.9553244	.9716319	.9826644
42	.9215648	.9748712	.98104310	.9616162	.92334754	.9562640	.9722765	.9822765
43	.9109494	.9720973	.9785938	.9535433	.9140656	.9448279	.9748504	.9772465
44	.9006198	.9691142	.9766391	.9464467	.9067000	.9365663	.9661442	.9736277
45	.8904561	.9652417	.9742676	.9391195	.8903314	.92199014	.9591168	.97081097
46	.8804182	.9603090	.9718336	.93194150	.88257636	.91423493	.9517168	.96717157
47	.87061875	.9543456	.9681167	.92434011	.8745603	.9033523	.9462016	.96264363
48	.8609492	.9467584	.9640243	.9168854	.8669499	.89297082	.9404680	.95721899
49	.8511489	.93820501	.9592765	.9097839	.8591634	.8844851	.93448431	.95195478
50	.8414589	.9286296	.95470936	.9037286	.8543499	.8773293	.92600120	.94600293
51	.832220	.9182363	.94900580	.8980827	.8493370	.8690876	.91830150	.94055375
52	.8235906	.9078795	.9431962	.8944357	.8402206	.8580003	.9107025	.9356862
53	.8157146	.8969673	.9379011	.8916574	.8317641	.84619102	.9038227	.9308054
54	.80899391	.8854894	.9323165	.8888854	.8233010	.8340447	.8967546	.92591066
55	.80309764	.8732123	.9272439	.886359	.8158313	.8219901	.8897998	.9215568
56	.80116352	.8605540	.921712	.8849756	.8082337	.8117376	.88231468	.91714689
57	.80008982	.8482165	.9167319	.8837133	.8008832	.8031778	.8746033	.9129649
58	.8000021	.8362681	.9117914	.8825777	.80149361	.8043613	.8661364	.9089272
59	.80001884	.8241791	.9067339	.8813578	.80224142	.8061372	.85760106	.90493577
60	.80001700	.8123213	.9014026	.8802442	.8039119	.8083442	.8493148	.90176277
61	.80006039	.8003451	.8962525	.8792224	.8063468	.8104578	.8409503	.9004647
62	.80003008	.8006446	.8913190	.8782813	.8098373	.8129876	.8324876	.8992355
63	.80001445	.8003220	.8868446	.8773315	.8137069	.8155061	.8240348	.8980340
64	.8000670	.8001351	.8823427	.8763737	.8174618	.8182884	.8152479	.8968341
65	.8000249	.8000720	.8771654	.875430	.8217615	.8215296	.8104952	.8956413
66	.8000189	.8000322	.8720770	.874755	.8263424	.8207977	.8015943	.8945053
67	.8000053	.8000139	.8670345	.8740817	.8311851	.8264009	.8000380	.8934554
68	.8000021	.8000058	.8620149	.873367	.83600862	.831941	.80004183	.8924640
69	.8000008	.8000023	.8570063	.8726158	.8408387	.8379905	.80002025	.8915433
70	.8000003	.8000009	.8520025	.8718046	.8456167	.8430404	.80000943	.89062101
71	.8000001	.8000003	.8470009	.8710026	.8503026	.84700175	.80000423	.88970978
72	.8000000	.8000001	.8420003	.8702010	.8549028	.85000182	.80000182	.88880437
73	.8000000	.8000000	.8370001	.8694004	.8598011	.85400029	.80000075	.887900188
74	.8000000	.8000000	.8320000	.8686001	.8646004	.85800011	.80000030	.887000077
75	.8000000	.8000000	.8270000	.8678000	.86930001	.86200004	.80000011	.886100031
76	.8000000	.8000000	.8220000	.8670000	.8740000	.86600001	.80000004	.885200013
77	.8000000	.8000000	.8170000	.8662000	.8780000	.87000001	.80000001	.884300004
78	.8000000	.8000000	.8120000	.8654000	.8820000	.87400001	.80000001	.883400001

x	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
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18	1.00000000	1.00000000
19	1.00000000	1.00000000
20	1.00000000	1.00000000
21	1.00000000	1.00000000
22	1.00000000	1.00000000
23	1.00000000	1.00000000
24	1.00000000	1.00000000
25	1.00000000	1.00000000
26	1.00000000	1.00000000
27	.99999999	1.00000000
28	.99999999	.99999999
29	.99999999	.99999999
30	.99999999	.99999999
31	.99999917	.99999969
32	.99999802	.99999920
33	.99999654	.99999864
34	.99999479	.99999791
35	.99999286	.99999698
36	.99999075	.99999573
37	.99998848	.99999424
38	.99998601	.99999259

AMCP 706-109

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 107

$\frac{c}{n}$	.49	.50
39	.09665513	.0982154
40	.0940388	.0967411
41	.0897718	.0942009
42	.0840783	.0900498
43	.07729573	.0835267
44	.06888649	.0738661
45	.0577370	.0593835
46	.04101233	.04188438
47	.02743630	.02121749
48	.018297698	.01776543
49	.01162185	.01331474
50	.007142605	.00802799
51	.00458110	.005189537
52	.002710645	.00304125
53	.00143480	.00165990
54	.00078541	.00080000
55	.0003691	.00034010
56	.00019198	.000145875
57	.00009153	.000070463
58	.000043088	.00003201
59	.00002084	.0000166886
60	.000009154	.000008457
61	.000004103	.000003801
62	.000001862	.000001563
63	.00000074	.000000665
64	.00000032	.000000339
65	.000000159	.00000016733
66	.0000000854	.00000008502
67	.0000000412	.00000004591
68	.0000000183	.00000002589
69	.00000000935	.000000017646
70	.00000000468	.000000009201
71	.000000002149	.000000004616
72	.000000001007	.000000002227
73	.000000000450	.000000001032
74	.000000000193	.000000000482
75	.000000000079	.000000000146
76	.000000000031	.000000000070
77	.000000000013	.000000000031
78	.000000000004	.000000000013
79	.000000000001	.000000000004
80		.000000000001

AMCP 706-109

$$P(n, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 100

p	.01	.02	.03	.04	.05	.06	.07	.08
1	.6628456	.8871720	.9627310	.9878099	.9960782	.9987474	.9994054	.9997778
2	.8937863	.6304905	.3382450	.1300646	.0273745	.0011106	.0001977	.0000243
3	.0946693	.3669706	.6328656	.8100836	.9100772	.9606254	.9834605	.9933605
4	.0036040	.1711808	.4071766	.6312531	.7939695	.9041045	.9491274	.9768807
5	.00047610	.0662934	.2444333	.4346710	.6324494	.7886948	.9012584	.9592636
6	.0000090	.0017698	.0066760	.02641015	.0556075	.0937567	.13749878	.0712057
7	.0001155	.0061714	.0244615	.0742480	.1424400	.2284673	.3196618	.4096618
8	.0000145	.0013306	.0063336	.0264487	.0733444	.1481044	.2407079	.3439928
9	.0000016	.0001376	.0053507	.02095343	.0610112	.12003863	.2034834	.2996935
10	.0000003	.0000266	.0018765	.0115156	.0443318	.1142174	.2443081	.3431928
11		.0000119	.0004209	.0040879	.0195138	.0597660	.1351203	.2456885
12		.0000019	.0001085	.0013837	.0070017	.0208013	.0753171	.1546473
13		.0000003	.0000029	.00001945	.0000389	.0128849	.0300314	.0906587
14			.00000047	.00001085	.00002025	.00004243	.01017071	.0495621
15			.00000009	.00000077	.00003886	.00020324	.00061775	.0253237
16			.00000002	.00000066	.00000960	.00007270	.0035050	.0101117
17				.00000015	.00000087	.00002430	.0013735	.0054334
18				.00000003	.00000070	.00000766	.00005058	.00002914
19				.00000001	.00000017	.00000286	.0001740	.00000064
20					.00000004	.00000063	.0000570	.00003409
21					.00000001	.00000016	.00000176	.00001307
22						.00000004	.00000051	.00000404
23						.00000001	.00000014	.00000128
24							.00000004	.00000004
25							.00000001	.00000011
26								.00000003
27								.00000001
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AMCP 706-109

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 108

	.17	.18	.19	.20	.21	.22	.23	.24
21	.2651214	.3458465	.4317743	.5255147	.6206443	.7227015	.8395452	.8911405
22	.2076475	.2962147	.3950439	.4999291	.6014294	.6945314	.7748441	.8404236
23	.1448962	.2184081	.3065580	.4054296	.5077897	.6073417	.6984174	.7708827
24	.0968384	.1545433	.2288102	.3170931	.4146472	.5153891	.6130577	.7023031
25	.0619771	.1048963	.1639721	.2380786	.3269577	.4235347	.5227556	.6186618
26	.0379859	.0662769	.1128683	.1731784	.2486366	.3364850	.4321251	.5299141
27	.0222993	.0426159	.0746019	.1207445	.1821742	.2581060	.3457048	.4404478
28	.0125416	.0255086	.0473412	.0809336	.1285182	.1909665	.2673071	.3546438
29	.0067600	.0146451	.0288429	.0521418	.0872574	.1361851	.2095637	.2962589
30	.0034933	.0080667	.0168729	.0328554	.0570007	.0935613	.1374288	.2079745
31	.0017314	.0042641	.0094791	.0192133	.0358210	.0619029	.0998352	.1511906
32	.0008734	.0021638	.0051153	.0109905	.0216531	.0394357	.0668356	.1060720
33	.0004578	.0011054	.0026522	.0060440	.0125940	.0241976	.0431175	.0717878
34	.0002448	.0005916	.0013216	.0031967	.0070469	.0142828	.0268007	.0468538
35	.0001269	.0003221	.0006331	.0016254	.0037942	.0081203	.0160408	.0294849
36	.0000681	.0001690	.0003297	.0007952	.0019661	.0044454	.0092602	.0178883
37	.0000359	.0000899	.0001722	.0003744	.0009807	.0023436	.0051478	.0104624
38	.0000194	.0000481	.0000951	.0002066	.0005410	.0012900	.0028754	.0058591
39	.0000105	.0000262	.0000526	.0001173	.0003173	.000821	.0018233	.0039266
40	.0000055	.0000133	.0000269	.0000611	.0001670	.0004273	.0009705	.0021685
41	.0000028	.0000068	.0000134	.0000312	.0000816	.0002044	.0005395	.0012492
42	.0000014	.0000034	.0000068	.0000152	.0000378	.0000954	.0002459	.0006138
43	.0000007	.0000016	.0000032	.0000076	.0000190	.0000478	.0001194	.0003081
44	.0000004	.0000008	.0000016	.0000036	.0000090	.0000224	.0000561	.0001444
45	.0000002	.0000004	.0000008	.0000018	.0000045	.0000112	.0000278	.0000705
46	.0000001	.0000002	.0000004	.0000009	.0000022	.0000056	.0000139	.0000358
47	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
48	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
49	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
50	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
51	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000

	.25	.26	.27	.28	.29	.30	.31	.32
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
8	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
9	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
10	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
11	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
12	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
13	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
14	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
15	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
16	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
17	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
18	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
19	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
20	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
21	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
22	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
23	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
24	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
25	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
26	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
27	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
28	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
29	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
30	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
31	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
32	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
33	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
34	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
35	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
36	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
37	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
38	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
39	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
40	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
41	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
42	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
43	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
44	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
45	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
46	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
47	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
48	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
49	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
50	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
51	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
52	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
53	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
54	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
55	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
56	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
57	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
58	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
59	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
60	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
61	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999

[illegible]

$$P(c,n,p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 108

	.41	.42	.43	.44	.45	.46	.47	.48
22	.9999984	.9999994	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
23	.9999980	.9999992	.9999996	.9999998	.9999999	1.0000000	1.0000000	1.0000000
24	.9999975	.9999987	.9999995	.9999998	.9999999	.9999999	1.0000000	1.0000000
25	.9999969	.9999984	.9999995	.9999998	.9999999	.9999999	.9999999	1.0000000
26	.9999963	.9999983	.9999986	.9999994	.9999996	.9999999	.9999999	.9999999
27	.9999954	.9999981	.9999987	.9999994	.9999996	.9999999	.9999999	.9999999
28	.9999945	.9999970	.9999982	.9999993	.9999996	.9999999	.9999999	.9999999
29	.9999936	.9999962	.9999984	.9999992	.9999996	.9999999	.9999999	.9999999
30	.9999927	.9999951	.9999981	.9999992	.9999996	.9999999	.9999999	.9999999
31	.9999918	.9999942	.9999976	.9999992	.9999996	.9999999	.9999999	.9999999
32	.9999909	.9999936	.9999970	.9999992	.9999996	.9999999	.9999999	.9999999
33	.9999900	.9999927	.9999963	.9999992	.9999996	.9999999	.9999999	.9999999
34	.9999891	.9999918	.9999954	.9999992	.9999996	.9999999	.9999999	.9999999
35	.9999882	.9999909	.9999945	.9999992	.9999996	.9999999	.9999999	.9999999
36	.9999873	.9999898	.9999936	.9999992	.9999996	.9999999	.9999999	.9999999
37	.9999864	.9999889	.9999927	.9999992	.9999996	.9999999	.9999999	.9999999
38	.9999855	.9999880	.9999918	.9999992	.9999996	.9999999	.9999999	.9999999
39	.9999846	.9999871	.9999909	.9999992	.9999996	.9999999	.9999999	.9999999
40	.9999837	.9999862	.9999900	.9999992	.9999996	.9999999	.9999999	.9999999
41	.9999828	.9999853	.9999891	.9999992	.9999996	.9999999	.9999999	.9999999
42	.9999819	.9999844	.9999882	.9999992	.9999996	.9999999	.9999999	.9999999
43	.9999810	.9999835	.9999871	.9999992	.9999996	.9999999	.9999999	.9999999
44	.9999801	.9999826	.9999862	.9999992	.9999996	.9999999	.9999999	.9999999
45	.9999792	.9999817	.9999853	.9999992	.9999996	.9999999	.9999999	.9999999
46	.9999783	.9999808	.9999844	.9999992	.9999996	.9999999	.9999999	.9999999
47	.9999774	.9999799	.9999835	.9999992	.9999996	.9999999	.9999999	.9999999
48	.9999765	.9999790	.9999826	.9999992	.9999996	.9999999	.9999999	.9999999
49	.9999756	.9999781	.9999817	.9999992	.9999996	.9999999	.9999999	.9999999
50	.9999747	.9999772	.9999808	.9999992	.9999996	.9999999	.9999999	.9999999
51	.9999738	.9999763	.9999799	.9999992	.9999996	.9999999	.9999999	.9999999
52	.9999729	.9999754	.9999785	.9999992	.9999996	.9999999	.9999999	.9999999
53	.9999720	.9999745	.9999776	.9999992	.9999996	.9999999	.9999999	.9999999
54	.9999711	.9999736	.9999767	.9999992	.9999996	.9999999	.9999999	.9999999
55	.9999702	.9999727	.9999758	.9999992	.9999996	.9999999	.9999999	.9999999
56	.9999693	.9999718	.9999749	.9999992	.9999996	.9999999	.9999999	.9999999
57	.9999684	.9999709	.9999740	.9999992	.9999996	.9999999	.9999999	.9999999
58	.9999675	.9999700	.9999731	.9999992	.9999996	.9999999	.9999999	.9999999
59	.9999666	.9999691	.9999722	.9999992	.9999996	.9999999	.9999999	.9999999
60	.9999657	.9999682	.9999713	.9999992	.9999996	.9999999	.9999999	.9999999
61	.9999648	.9999673	.9999704	.9999992	.9999996	.9999999	.9999999	.9999999
62	.9999639	.9999664	.9999695	.9999992	.9999996	.9999999	.9999999	.9999999
63	.9999630	.9999655	.9999686	.9999992	.9999996	.9999999	.9999999	.9999999
64	.9999621	.9999646	.9999677	.9999992	.9999996	.9999999	.9999999	.9999999
65	.9999612	.9999637	.9999668	.9999992	.9999996	.9999999	.9999999	.9999999
66	.9999603	.9999628	.9999659	.9999992	.9999996	.9999999	.9999999	.9999999
67	.9999594	.9999619	.9999650	.9999992	.9999996	.9999999	.9999999	.9999999
68	.9999585	.9999610	.9999641	.9999992	.9999996	.9999999	.9999999	.9999999
69	.9999576	.9999601	.9999632	.9999992	.9999996	.9999999	.9999999	.9999999
70	.9999567	.9999592	.9999623	.9999992	.9999996	.9999999	.9999999	.9999999
71	.9999558	.9999583	.9999614	.9999992	.9999996	.9999999	.9999999	.9999999
72	.9999549	.9999574	.9999605	.9999992	.9999996	.9999999	.9999999	.9999999
73	.9999540	.9999565	.9999596	.9999992	.9999996	.9999999	.9999999	.9999999
74	.9999531	.9999556	.9999587	.9999992	.9999996	.9999999	.9999999	.9999999
75	.9999522	.9999547	.9999578	.9999992	.9999996	.9999999	.9999999	.9999999
76	.9999513	.9999538	.9999569	.9999992	.9999996	.9999999	.9999999	.9999999
77	.9999504	.9999529	.9999560	.9999992	.9999996	.9999999	.9999999	.9999999
78	.9999495	.9999520	.9999551	.9999992	.9999996	.9999999	.9999999	.9999999
79	.9999486	.9999511	.9999542	.9999992	.9999996	.9999999	.9999999	.9999999

	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	1.0000000	1.0000000
8	1.0000000	1.0000000
9	1.0000000	1.0000000
10	1.0000000	1.0000000
11	1.0000000	1.0000000
12	1.0000000	1.0000000
13	1.0000000	1.0000000
14	1.0000000	1.0000000
15	1.0000000	1.0000000
16	1.0000000	1.0000000
17	1.0000000	1.0000000
18	1.0000000	1.0000000
19	1.0000000	1.0000000
20	1.0000000	1.0000000
21	1.0000000	1.0000000
22	1.0000000	1.0000000
23	1.0000000	1.0000000
24	1.0000000	1.0000000
25	1.0000000	1.0000000
26	1.0000000	1.0000000
27	.9999999	1.0000000
28	.9999997	.9999999
29	.9999993	.9999997
30	.9999988	.9999992
31	.9999984	.9999988
32	.9999979	.9999983
33	.9999974	.9999978
34	.9999969	.9999973
35	.9999964	.9999968

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$$P(o, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 100

	.49	.50
36	.9996476	.9998371
37	.9993073	.9996579
38	.9986136	.9993093
39	.9974043	.9986577
40	.9953189	.9974882
41	.9918626	.9954710
42	.9863550	.9921254
43	.9779136	.9867882
44	.9654652	.9785964
45	.9477967	.9664948
46	.9236532	.9493836
47	.8921884	.9257118
48	.8516200	.8946171
49	.8024571	.8551009
50	.7446185	.8067137
51	.6790453	.7496168
52	.6073953	.6846831
53	.5319380	.6135057
54	.4553350	.5382995
55	.3803732	.4617005
56	.3096605	.3864943
57	.2433605	.3153169
58	.1890014	.2503832
59	.1413874	.1932863
60	.1026190	.1448991
61	.0721998	.1053829
62	.0492020	.0742882
63	.0324519	.0507164
64	.0207013	.0335052
65	.0127632	.0214036
66	.0076004	.0132118
67	.0043687	.0078746
68	.0024222	.0045290
69	.0012547	.0025118
70	.0006667	.0013423
71	.0003305	.0006908
72	.0001576	.0003421
73	.0000723	.0001622
74	.0000318	.0000745
75	.0000135	.0000326
76	.0000055	.0000138
77	.0000021	.0000056
78	.0000008	.0000022
79	.0000003	.0000008
80	.0000001	.0000003
81		.0000001

$$P(c,n,p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 109

	.01	.02	.03	.04	.05	.06	.07	.08
1	.6654231	.8894287	.9638491	.9883167	.9962684	.9988224	.9996330	.9998871
2	.9974708	.6434641	.8419796	.9252352	.9748621	.9906306	.9966822	.9988165
3	.9956605	.3724010	.6344830	.8158668	.9143923	.9623943	.9843847	.9937887
4	.9843147	.1750966	.4139274	.6384424	.7998149	.9081127	.9515382	.9781921
5	.9004944	.0683912	.2399155	.4425362	.6405254	.7893805	.8860036	.9422729
6	.0008416	.0826603	.1104027	.2711183	.4644686	.6436330	.7824263	.8765687
7	.0001224	.0064834	.0463339	.1473165	.3038553	.4823805	.6473921	.7777669
8	.0000195	.0012856	.0171775	.0714183	.1794706	.3303226	.4950835	.6512674
9	.0000017	.0003216	.0056803	.0310911	.0960019	.2076761	.3540007	.5109938
10	.0000002	.0000721	.0016897	.0122363	.0467017	.1193875	.2326798	.3741183
11		.0000130	.0004556	.0043802	.0207542	.0630330	.1413630	.2550833
12		.0000021	.0001121	.0014341	.0084633	.0306892	.0795033	.1619301
13		.0000003	.0000253	.0004316	.0031804	.0137835	.0414784	.0957778
14			.0000053	.0001057	.0011077	.0057461	.0201388	.0589583
15			.0000010	.0000309	.0003569	.0022282	.0091206	.0372633
16			.0000002	.0000074	.0001073	.0008061	.0038462	.0131686
17				.0000017	.0000302	.0002788	.0015287	.0059681
18				.0000003	.0000079	.0000866	.0005660	.0028428
19				.0000001	.0000020	.0000288	.0001890	.0009224
20					.0000005	.0000073	.0000653	.0003864
21					.0000001	.0000015	.0000803	.0001383
22						.0000005	.0000040	.0000464
23							.0000017	.000011
24							.0000004	.0000045
25							.0000001	.0000013
26								.0000004
27								.0000001

	.09	.10	.11	.12	.13	.14	.15	.16
1	.9999657	.9999897	.9999970	.9999991	.9999997	.9999999	1.0000000	1.0000000
2	.9999557	.9999851	.9999959	.9999985	.9999996	.9999998	.9999999	.9999999
3	.9999357	.9999751	.9999929	.9999985	.9999997	.9999999	.9999999	.9999999
4	.9998508	.9991173	.9996822	.9994755	.9992829	.9991217	.9990785	.9990906
5	.9723845	.9874284	.9943232	.9977068	.9990740	.9996384	.9998638	.9999478
6	.9344473	.9670688	.9842650	.9928129	.9968423	.9986701	.9994581	.9997864
7	.8694181	.9278577	.9638886	.9812456	.9910873	.9953977	.9982189	.9992470
8	.7747690	.8637508	.9223218	.9580358	.9784185	.9893927	.9950813	.9977189
9	.6544251	.7729326	.8553401	.9176825	.9542822	.9758081	.9877616	.9940635
10	.5289666	.6396902	.7719845	.8559227	.9138084	.9509908	.9734841	.9868158
11	.3919636	.5338652	.6640163	.7717213	.8533303	.9105904	.9481227	.9718667
12	.2755565	.4080403	.5439168	.6683747	.7718978	.8513792	.9079381	.9436481
13	.1811739	.2893658	.4226929	.5532841	.6727471	.7727069	.8482861	.9018618
14	.1167144	.1999893	.3108986	.4361815	.5630884	.6771219	.7737822	.8481306
15	.0645363	.1270684	.2161516	.3266829	.4487040	.5704224	.6814917	.7751810
16	.0350121	.0763373	.1419864	.2321159	.3414016	.4604143	.5783587	.6858517
17	.0178872	.0432081	.0881338	.1563249	.2472036	.3552031	.4714341	.5839551
18	.0085757	.0207071	.0430701	.0848345	.1470020	.2348062	.3482093	.4786118
19	.0043839	.0114347	.0227190	.0434724	.0833937	.1335464	.2038104	.2853820
20	.0016614	.0055489	.0151028	.0347210	.0693064	.1227626	.1964124	.2800704
21	.0006723	.0025059	.0075297	.0189344	.0410063	.0782350	.1339218	.2088270
22	.0002578	.0010730	.0035629	.0098109	.0230845	.0475143	.0871846	.1448578
23	.0000937	.0004362	.0016017	.0048345	.0113725	.0239911	.0441929	.0768184
24	.0000324	.0001685	.0006495	.0022676	.0053180	.0115922	.0231720	.0410822
25	.0000106	.0000620	.0002788	.0010133	.0030762	.0080067	.0182463	.0370340
26	.0000033	.0000217	.0001082	.0004318	.0014292	.0040296	.0098909	.0215118
27	.0000010	.0000072	.0000400	.0001726	.0006341	.0019378	.0051278	.0119396
28	.0000003	.0000023	.0000141	.0000824	.0002882	.0008436	.0022430	.0054464
29	.0000001	.0000007	.0000028	.0000153	.0000509	.0001591	.0004207	.0010825
30		.0000002	.0000015	.0000090	.0000423	.0001651	.0005491	.0013866
31		.0000001	.0000005	.0000031	.0000157	.0000566	.0002394	.0007434
32			.0000001	.0000010	.0000056	.0000285	.0001000	.0003142
33				.0000003	.0000019	.0000094	.0000401	.0001481
34				.0000001	.0000006	.0000032	.0000154	.0000597
35					.0000002	.0000012	.0000057	.0000238
36					.0000001	.0000004	.0000020	.0000091
37						.0000001	.0000007	.0000033
38							.0000002	.0000012
39							.0000001	.0000004
40								.0000001

	.17	.18	.19	.20	.21	.22	.23	.24
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	.9999996	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	.9999999	.9999999	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
5	.9999981	.9999998	.9999979	.9999993	.9999998	.9999999	1.0000000	1.0000000
6	.9999184	.9999698	.9999891	.9999962	.9999987	.9999996	.9999999	1.0000000
7	.9996924	.9998784	.9999534	.9999827	.9999937	.9999978	.9999993	.9999998
8	.9990112	.9995832	.9998301	.9999329	.9999743	.9999903	.9999966	.9999988
9	.9972322	.9987570	.9994614	.9997745	.9999086	.9999641	.9999864	.9999950
10	.9931433	.9967219	.9984908	.9993298	.9997125	.9998808	.9999551	.9999914
11	.9847684	.9922545	.9962140	.9982181	.9991913	.9996456	.9998499	.9999385
12	.9693304	.9834286	.9914076	.9957149	.9979443	.9990487	.9995750	.9998166
13	.9435074	.9676067	.9822003	.9906103	.9952372	.9975737	.9989046	.9995022
14	.9040425	.9416920	.9660852	.9810845	.9898678	.9947800	.9974102	.9987613
15	.8486159	.9026845	.9401646	.9647545	.9800805	.9891835	.9943495	.9971571
16	.7757167	.8484545	.9016571	.9388927	.9636033	.9791862	.9885593	.9934486
17	.6901994	.7735777	.8485904	.9009230	.9378705	.9626201	.9783982	.9879961
18	.5932584	.6945334	.7804940	.8488956	.9004490	.9370590	.9617942	.9777128
19	.4917753	.6003070	.6988530	.7826211	.8496082	.9002101	.9364451	.9611152
20	.3922222	.5012423	.6071329	.7031584	.7848792	.8504319	.9001800	.9360118
21	.3004665	.4033858	.5103172	.6137629	.7074501	.7878518	.8514341	.9003387
22	.2208181	.3121485	.4140707	.5190462	.6202149	.7117288	.7897254	.8525956

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$$P(n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 109

x	.17	.18	.19	.20	.21	.22	.23	.24
23	.1555639	.1384133	.1237653	.1123295	.1027467	.0946934	.0879566	.0823887
24	.1050002	.0960409	.0876392	.0797604	.0724271	.0655835	.0592004	.0532519
25	.0679036	.0613331	.0552905	.0497415	.0446755	.0399722	.0356021	.0315357
26	.0420644	.0374868	.0333778	.0296164	.0261843	.0230659	.0201570	.0174434
27	.0249660	.0218349	.0191725	.0168678	.0148013	.0129629	.0113428	.0099297
28	.0142004	.0125879	.0112527	.0099858	.0087859	.0076522	.0065737	.0055486
29	.0077429	.0068005	.0059575	.0052002	.0045269	.0039282	.0033944	.0029153
30	.0040486	.0035208	.0030147	.0025267	.0020546	.0016069	.0011834	.0008838
31	.0020309	.0017486	.0014863	.0012477	.0010267	.0008287	.0006480	.0004818
32	.0009777	.0008219	.0006844	.0005631	.0004569	.0003638	.0002825	.0002119
33	.0004519	.0003842	.0003203	.0002610	.0002069	.0001578	.0001136	.0000744
34	.0002006	.0001694	.0001427	.0001194	.0000991	.0000806	.0000638	.0000486
35	.0000856	.0000710	.0000589	.0000491	.0000406	.0000332	.0000268	.0000214
36	.0000351	.0000287	.0000235	.0000193	.0000159	.0000130	.0000104	.0000081
37	.0000138	.0000112	.0000091	.0000072	.0000057	.0000045	.0000034	.0000025
38	.0000053	.0000042	.0000032	.0000024	.0000018	.0000013	.0000009	.0000006
39	.0000019	.0000015	.0000011	.0000008	.0000006	.0000004	.0000003	.0000002
40	.0000007	.0000005	.0000004	.0000003	.0000002	.0000001	.0000001	.0000000
41	.0000002	.0000001	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
42	.0000001	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
43	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
44	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
45	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
46	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
47	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
48	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
49	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
50	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
51	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
52	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
53	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
54	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
55	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
56	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
57	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
58	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
59	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
60	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
61	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
62	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
63	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
64	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
65	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
66	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
67	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
68	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
69	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
70	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
71	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
72	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
73	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
74	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
75	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
76	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
77	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
78	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
79	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
80	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
81	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
82	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
83	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
84	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
85	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
86	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
87	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
88	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
89	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
90	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
91	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
92	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
93	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
94	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
95	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
96	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
97	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
98	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
99	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
100	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
101	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
102	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
103	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
104	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
105	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
106	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
107	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
108	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
109	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000

$$P(n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 109

p	.41	.42	.43	.44	.45	.46	.47	.48
22	.9999989	.9999996	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
23	.9999967	.9999988	.9999996	.9999998	.9999999	1.0000000	1.0000000	1.0000000
24	.9999911	.9999965	.9999987	.9999995	.9999998	.9999999	1.0000000	1.0000000
25	.9999771	.9999907	.9999963	.9999986	.9999995	.9999998	.9999999	1.0000000
26	.9999440	.9999763	.9999903	.9999962	.9999986	.9999995	.9999998	.9999999
27	.9998997	.9999427	.9999757	.9999901	.9999961	.9999985	.9999995	.9999998
28	.9997710	.9998678	.9999417	.9999753	.9999900	.9999980	.9999995	.9999998
29	.9993881	.9997090	.9998667	.9999412	.9999751	.9999988	.9999998	.9999998
30	.9987612	.9993878	.9997087	.9998665	.9999411	.9999750	.9999988	.9999996
31	.9975997	.9987677	.9993907	.9997100	.9998675	.9999415	.9999752	.9999989
32	.9955426	.9976232	.9987794	.9993965	.9997120	.9998686	.9999426	.9999755
33	.9920588	.9956031	.9976553	.9987962	.9994031	.9997172	.9998707	.9999432
34	.9864084	.9921898	.9956767	.9978955	.9988176	.9994164	.9997230	.9998736
35	.9776323	.9866650	.9923402	.9957628	.9977432	.9988435	.9994300	.9997300
36	.9645638	.9780910	.9869466	.9925079	.9958505	.9977978	.9988714	.9994450
37	.9458963	.9653307	.9785819	.9872514	.9936914	.9959668	.9978507	.9989069
38	.9203052	.9470988	.9661345	.9791029	.9875773	.9928894	.9960034	.9979233
39	.8866089	.9228838	.9483411	.9669720	.9796492	.9879224	.9931004	.9962084
40	.8439699	.8891063	.9239043	.9496199	.9678403	.9802195	.9882647	.9933232
41	.7921838	.8473160	.8916435	.9257600	.9509320	.9687365	.9808112	.9886624
42	.7314903	.7963873	.8506858	.8942820	.9276503	.9522744	.9696578	.9814221
43	.6632714	.7366778	.8006807	.8540784	.8968097	.9295701	.9536441	.9706015
44	.5894057	.6693071	.7418592	.8049447	.8574928	.8994345	.9315173	.9530383
45	.5124101	.5961288	.6753207	.7470372	.8092401	.8609280	.9020844	.9334893
46	.4351245	.5195855	.6028158	.6813168	.7522143	.8135475	.8643332	.9047573
47	.3604019	.4424686	.5267160	.6094734	.6872996	.7573929	.8178375	.8678574
48	.2907990	.3676149	.4497641	.5338088	.6161068	.6932731	.7625752	.8222004
49	.2283236	.2976009	.3747810	.4570176	.5408690	.6227215	.6992412	.7677634
50	.1748762	.2344848	.3043618	.3819058	.4642353	.5479038	.6293207	.7052807
51	.1292061	.1796391	.2406139	.3110861	.3869949	.4714234	.5549188	.6359153
52	.0929733	.1336933	.1849798	.2467116	.3177761	.3960539	.4785880	.5619198
53	.0646894	.0965830	.1381676	.1902993	.2521086	.3244421	.4030882	.4857351
54	.0439005	.0676823	.1001878	.1426284	.1955984	.2588385	.3310824	.4101038
55	.0287748	.0459789	.0704753	.1037884	.1470752	.2008785	.2648633	.3377035
56	.0182637	.0302626	.0480606	.0732660	.1073743	.1515077	.20611407	.2708730
57	.0112203	.0192884	.0317551	.0501428	.0760519	.1109531	.1559257	.2113865
58	.0066692	.0118992	.0203177	.0332496	.0522229	.0788310	.1145204	.1603292
59	.0036337	.0071019	.0125821	.0213494	.0347433	.0542903	.0816009	.1180749
60	.0021305	.0040990	.0075377	.0132671	.0223810	.0368338	.0563665	.0843597
61	.0011442	.0022870	.0043665	.0079751	.0139522	.0234102	.0377184	.0584449
62	.0005936	.0012329	.0024448	.0046351	.0084125	.0146354	.0244346	.0391945
63	.0002974	.0006420	.0013225	.0026033	.0049035	.0089484	.0155146	.0254517
64	.0001438	.0003287	.0006908	.0014124	.0027617	.0051707	.0092810	.0159878
65	.0000671	.0001566	.0003484	.0007398	.0015021	.0029190	.0054354	.0097089
66	.0000302	.0000713	.0001695	.0003740	.0007686	.0015910	.0030744	.0056963
67	.0000131	.0000331	.0000795	.0001824	.0003995	.0008369	.0016785	.0032270
68	.0000055	.0000144	.0000360	.0000857	.0001951	.0004246	.0008642	.0017642
69	.0000022	.0000060	.0000157	.0000388	.0000919	.0002076	.0004490	.0009301
70	.0000009	.0000024	.0000066	.0000170	.0000417	.0001097	.0002190	.0004727
71	.0000003	.0000009	.0000027	.0000071	.0000182	.0000444	.0001036	.0002314
72	.0000001	.0000004	.0000010	.0000029	.0000076	.0000194	.0000470	.0001090
73		.0000001	.0000004	.0000011	.0000031	.0000081	.0000208	.0000494
74			.0000001	.0000004	.0000012	.0000033	.0000086	.0000215
75				.0000001	.0000004	.0000013	.0000035	.0000090
76				.0000001	.0000002	.0000005	.0000013	.0000036
77					.0000001	.0000002	.0000005	.0000014
78						.0000001	.0000002	.0000005
79							.0000001	.0000002
80								.0000001

p	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	1.0000000	1.0000000
8	1.0000000	1.0000000
9	1.0000000	1.0000000
10	1.0000000	1.0000000
11	1.0000000	1.0000000
12	1.0000000	1.0000000
13	1.0000000	1.0000000
14	1.0000000	1.0000000
15	1.0000000	1.0000000
16	1.0000000	1.0000000
17	1.0000000	1.0000000
18	1.0000000	1.0000000
19	1.0000000	1.0000000
20	1.0000000	1.0000000
21	1.0000000	1.0000000
22	1.0000000	1.0000000
23	1.0000000	1.0000000
24	1.0000000	1.0000000
25	1.0000000	1.0000000
26	1.0000000	1.0000000
27	1.0000000	1.0000000
28	1.0000000	1.0000000
29	1.0000000	1.0000000
30	1.0000000	1.0000000
31	1.0000000	1.0000000
32	1.0000000	1.0000000
33	1.0000000	1.0000000
34	1.0000000	1.0000000
35	1.0000000	1.0000000

	.49	.50
36	.9907382	.9998013
37	.9994638	.9997473
38	.9989437	.9994835
39	.9979969	.9989834
40	.9963408	.9980729
41	.9933563	.9964796
42	.9890537	.9937982
43	.9820499	.9894568
44	.9713649	.9826923
45	.9564543	.9725456
46	.9384836	.9578622
47	.9074513	.9374977
48	.8713496	.9101645
49	.8261469	.8748590
50	.7729594	.8309073
51	.7111761	.7781652
52	.6423043	.7171499
53	.5689125	.6470944
54	.4928705	.5753026
55	.4171045	.5000000
56	.3443097	.4240974
57	.2768675	.3509056
58	.2166173	.2828501
59	.1647182	.2218348
60	.1216155	.1690097
61	.0871052	.1251410
62	.0604709	.0898355
63	.0406595	.0625023
64	.0264581	.0421108
65	.0166529	.0274544
66	.0101302	.0173097
67	.0059522	.0105432
68	.0033760	.0062018
69	.0018472	.0035204
70	.0009742	.0019271
71	.0004952	.0010166
72	.0002423	.0005103
73	.0001141	.0002525
74	.0000577	.0001187
75	.0000225	.0000537
76	.0000094	.0000233
77	.0000038	.0000097
78	.0000014	.0000039
79	.0000005	.0000015
80	.0000002	.0000005
81	.0000001	.0000002
82		.0000001

AMCP 706-109

$$P(r, p, P) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 110

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.6689669	.8916402	.9649336	.9887841	.9964552	.9988932	.9996587	.9998961
2	.3011524	.0813814	.0446357	.0217777	.0105324	.0051222	.0025330	.0012902
3	.0986886	.0377823	.0144310	.0064423	.0027064	.0010888	.0004514	.0001918
4	.0250381	.0109427	.0040629	.0015393	.0005525	.0002096	.0000838	.0000346
5	.0051430	.0020253	.0007359	.0002724	.0001009	.0000394	.0000150	.0000057
6	.0008827	.0003574	.0001398	.0000511	.0000197	.0000077	.0000030	.0000012
7	.0001296	.0000509	.0000192	.0000074	.0000028	.0000011	.0000004	.0000002
8	.0000166	.0000064	.0000024	.0000009	.0000004	.0000001	.0000000	.0000000
9	.0000019	.0000008	.0000003	.0000001	.0000000	.0000000	.0000000	.0000000
10	.0000002	.0000001	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
11		.0000012	.0000005	.0000002	.0000001	.0000000	.0000000	.0000000
12		.0000002	.0000001	.0000000	.0000000	.0000000	.0000000	.0000000
13		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
14			.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
15				.0000000	.0000000	.0000000	.0000000	.0000000
16					.0000000	.0000000	.0000000	.0000000
17						.0000000	.0000000	.0000000
18							.0000000	.0000000
19								.0000000
20								.0000000
21					.0000001	.0000000	.0000000	.0000000
22						.0000000	.0000000	.0000000
23							.0000000	.0000000
24								.0000000
25								.0000000
26								.0000000
27								.0000000

x	.09	.10	.11	.12	.13	.14	.15	.16
1	.9999288	.9999907	.9999973	.9999992	.9999999	.9999999	1.0000000	1.0000000
2	.9999288	.9999907	.9999973	.9999992	.9999999	.9999999	.9999999	.9999999
3	.9997778	.9999121	.9999713	.9999903	.9999964	.9999982	.9999996	.9999999
4	.9912778	.9964503	.9986002	.9994725	.9998062	.9999309	.9999760	.9999919
5	.9740284	.9883069	.9949579	.9979119	.9991661	.9996781	.9998796	.9999563
6	.9378616	.9691048	.9853934	.9934002	.9971385	.9988056	.9995188	.9998125
7	.8752458	.9317788	.9647060	.9828317	.9918364	.9963202	.9984046	.9993333
8	.7832869	.8701615	.9267183	.9608210	.9800654	.9903050	.9954839	.9977770
9	.6661661	.7820144	.8662685	.9285249	.9574199	.9777100	.9888475	.9944511
10	.5348878	.6710144	.7815736	.8733401	.9190700	.9546552	.9755747	.9874713
11	.4037538	.5464477	.6759228	.7818243	.8611925	.9162465	.9519179	.9736585
12	.2858511	.4206228	.5571278	.6807763	.7828710	.8596859	.9139658	.9497403
13	.1896503	.3052833	.4360275	.5670950	.6856497	.7837239	.8587120	.9101547
14	.1179266	.2086741	.3231962	.4502338	.5764740	.6850818	.7752079	.8501855
15	.0687785	.1343004	.2265738	.3398227	.4634440	.5853603	.6953352	.7869610
16	.0376693	.0814124	.1501446	.2434640	.3553509	.4758155	.5938987	.7001140
17	.0194012	.0455210	.0940571	.1654462	.2594444	.3699327	.4874728	.6019336
18	.0094110	.0250845	.0557263	.1066200	.1802122	.2746237	.3826950	.4985112
19	.0043061	.0127783	.0313458	.0685173	.1190388	.1944606	.2890703	.3967315
20	.0018615	.0051574	.0126005	.0378082	.0747777	.1131724	.1682162	.2340625
21	.0007614	.0021102	.0053627	.0120828	.0246853	.0444688	.0732951	.1050559
22	.0002951	.0008163	.0020992	.0050958	.0109058	.0218153	.0394152	.0550924
23	.0001385	.0003999	.0010173	.0025317	.0051765	.0103308	.0191425	.0303166
24	.0000637	.0001853	.0004857	.0012577	.0027105	.0051765	.0103308	.0191425
25	.0000126	.0000372	.0000935	.0002335	.0005169	.0010912	.0020335	.0036600
26	.0000040	.0000112	.0000289	.0000716	.0001643	.0003583	.0007144	.0013487
27	.0000013	.0000033	.0000087	.0000224	.0000537	.0001153	.0002306	.0004413
28	.0000003	.0000008	.0000020	.0000050	.0000122	.0000266	.0000532	.0001065
29	.0000001	.0000003	.0000008	.0000020	.0000050	.0000122	.0000266	.0000532
30		.0000001	.0000003	.0000008	.0000020	.0000050	.0000122	.0000266
31		.0000000	.0000001	.0000003	.0000008	.0000020	.0000050	.0000122
32			.0000000	.0000001	.0000003	.0000008	.0000020	.0000050
33				.0000000	.0000001	.0000003	.0000008	.0000020
34					.0000000	.0000001	.0000003	.0000008
35						.0000000	.0000001	.0000003
36							.0000000	.0000001
37								.0000000
38								.0000000
39								.0000000
40								.0000000
41								.0000000

x	.17	.18	.19	.20	.21	.22	.23	.24
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	.9999973	.9999991	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
5	.9999842	.9999947	.9999982	.9999994	.9999998	.9999999	1.0000000	1.0000000
6	.9999292	.9999741	.9999908	.9999968	.9999989	.9999996	.9999999	1.0000000
7	.9997308	.9998948	.9999602	.9999854	.9999948	.9999982	.9999994	.9999998
8	.9991270	.9996363	.9998535	.9999429	.9999784	.9999921	.9999972	.9999990
9	.9975347	.9980557	.9986514	.9990812	.9994224	.9996699	.9998287	.9999059
10	.9918384	.9970882	.9986752	.9994187	.9997537	.9998991	.9999600	.9999844
11	.9861922	.9930586	.9965466	.9984405	.9993008	.9996971	.9998734	.9999488
12	.9719544	.9850173	.9923208	.9962172	.9982062	.9991800	.9996383	.9998438
13	.9478973	.9704547	.9839497	.9916316	.9958067	.9979762	.9990588	.9995776
14	.9107518	.9463567	.9691170	.9829877	.9909254	.9944166	.9967539	.9982391
15	.8580385	.9097059	.9450095	.9680205	.9821353	.9904147	.9950335	.9975421
16	.7889326	.8580215	.9089735	.9440698	.9670615	.9813856	.9898910	.9947187
17	.7049074	.7811064	.8585731	.9085101	.9432744	.9662647	.9801732	.9891447
18	.6097304	.7029506	.7934323	.8593770	.9083082	.9426824	.9656132	.9801808
19	.5090274	.6172678	.7143640	.7958940	.8602850	.9083169	.9423754	.9650986
20	.4091467	.5190740	.6245597	.7190509	.7924723	.8613831	.9085210	.9420366
21	.3167651	.4209999	.5287122	.6316420	.7237102	.8011514	.8626456	.9089002

$$f(n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 110

X	.17	.18	.19	.20	.21	.22	.23	.24
23	.0343583	.3287352	.4323575	.5379895	.6385382	.7283439	.8039184	.8640540
24	.1686571	.2488016	.3409233	.4432728	.5469463	.6452686	.7329534	.8067623
25	.1136022	.1779870	.2588632	.3526742	.4537921	.5561177	.6518506	.7375404
26	.0742113	.1232309	.1890868	.2705693	.3640278	.4639534	.5640331	.6582995
27	.0464571	.0818421	.1327832	.1999590	.2819446	.3750194	.4737978	.5722189
28	.0278728	.0522089	.0895065	.1422487	.2106114	.2930124	.3856809	.4833502
29	.0168036	.0314444	.0580975	.0973629	.1516185	.2210518	.3037944	.3960406
30	.0088406	.0187583	.0336188	.0640993	.1051338	.1608870	.2312892	.3143110
31	.0046746	.0105738	.0216572	.0403854	.0701938	.1129041	.1700511	.2413328
32	.0023739	.0057230	.0124539	.0247135	.0451168	.0763633	.1206629	.1791093
33	.0011568	.0029751	.0068829	.0144736	.0279141	.0497661	.0825924	.1284008
34	.0005413	.0014860	.0036568	.0081536	.0166248	.0312462	.0545186	.0888683
35	.0002434	.0007133	.0018681	.0044191	.0095317	.0188995	.0346978	.0593607
36	.0001052	.0003292	.0009179	.0023047	.0052615	.0110129	.0212896	.0382578
37	.0000437	.0001461	.0004339	.0011569	.0027967	.0061828	.0125930	.0237872
38	.0000175	.0000624	.0001974	.0005391	.0014317	.0033445	.0071811	.0142870
39	.0000067	.0000256	.0000865	.0002402	.0007060	.0017435	.0039480	.0082543
40	.0000025	.0000101	.0000365	.0001166	.0003355	.0008760	.0020928	.0046067
41	.0000009	.0000039	.0000148	.0000504	.0001536	.0004242	.0010698	.0024802
42	.0000003	.0000014	.0000058	.0000210	.0000678	.0001981	.0005274	.0012882
43	.0000001	.0000005	.0000022	.0000084	.0000288	.0000892	.0002508	.0006456
44	.0000000	.0000002	.0000009	.0000032	.0000118	.0000387	.0001150	.0003122
45	.0000000	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001
46				.0000002	.0000007	.0000026	.0000090	.0000285
47				.0000001	.0000002	.0000010	.0000036	.0000120
48					.0000001	.0000003	.0000014	.0000048
49						.0000001	.0000005	.0000019
50							.0000002	.0000007
51							.0000001	.0000003
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$$P(n, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 110

λp	.49	.50
36	.9998063	.9999138
37	.9998983	.9999814
38	.9999866	.9999955
39	.9999980	.9999993
40	.9999999	.9999999
41	.9999999	.9999999
42	.9999999	.9999999
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45	.9999999	.9999999
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74	.9999999	.9999999
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76	.9999999	.9999999
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78	.9999999	.9999999
79	.9999999	.9999999
80	.9999999	.9999999
81	.9999999	.9999999
82	.9999999	.9999999

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 111

	.01	.02	.03	.04	.05	.06	.07	.08
1	.6722772	.8938074	.9659886	.9892327	.9966324	.9989596	.9996826	.9999044
2	.3046308	.5151915	.6340114	.7391399	.815585	.870308	.9098177	.9458217
3	.1066978	.2838335	.4305815	.5551126	.6700079	.7657108	.8360528	.8945626
4	.0357745	.1030183	.2427395	.4595435	.6811023	.8905968	.9560305	.9866259
5	.0053420	.0726956	.2409927	.4581791	.6563417	.8022683	.8950175	.9478916
6	.0006923	.0245139	.1176315	.2848709	.4820323	.6609855	.7967407	.8869754
7	.0001371	.0071423	.0302280	.1572968	.3195552	.5016750	.6608571	.7933950
8	.0000177	.0018244	.0169583	.0775630	.1919996	.3491399	.5185112	.6713377
9	.0000020	.0004135	.0063859	.0343739	.1044511	.2225632	.3741383	.5333512
10	.0000002	.0000840	.0019359	.0137791	.0517171	.1301080	.2497741	.3960384
11		.0000154	.0005321	.0050263	.0234073	.0699105	.1542944	.2742422
12		.0000026	.0001335	.0016776	.0097365	.0346304	.0883080	.1770002
13		.0000004	.0000307	.0005149	.0037262	.0158644	.0469167	.1065350
14		.0000001	.0000065	.0001460	.0013212	.0067424	.0231943	.0598724
15			.0000013	.0000384	.0004351	.0028666	.0106943	.0314691
16			.0000002	.0000094	.0001335	.0009843	.0046101	.0154974
17				.0000021	.0000383	.0003400	.0018624	.0071643
18				.0000005	.0000103	.0001102	.0007067	.0031150
19				.0000001	.0000026	.0000336	.0002524	.0012762
20					.0000006	.0000096	.0000850	.0004935
21					.0000001	.0000026	.0000270	.0001605
22						.0000007	.0000081	.0000625
23						.0000002	.0000023	.0000205
24							.0000006	.0000044
25							.0000002	.0000019
26								.0000005
27								.0000001
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$$P(r, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r} \quad n = 111$$

	.17	.18	.19	.20	.21	.22	.23	.24
22	.2482485	.3453428	.4506649	.5567200	.6564243	.7443615	.8174857	.8748171
23	.1781663	.2615296	.3580558	.4482128	.5324027	.6108451	.6792754	.7391193
24	.1282119	.1903743	.2745466	.3707340	.4733345	.5753409	.6705043	.7593337
25	.0809079	.1330068	.2023443	.2869903	.3826763	.4841211	.5842311	.6777317
26	.0511753	.0893248	.1434809	.2140811	.2991821	.3945853	.4945519	.5928702
27	.0310321	.0575301	.0978101	.1537908	.2255913	.3110540	.4059478	.5044787
28	.0180437	.0355296	.0640449	.1063401	.1640070	.2368332	.3226283	.4169949
29	.0100629	.0211318	.0403513	.0707850	.1148954	.1741333	.2479554	.3333361
30	.0053845	.0120470	.0244181	.0452882	.0775311	.1234503	.1841359	.2590476
31	.0027654	.0065961	.0143026	.0278879	.0503889	.0844022	.1320222	.1940430
32	.0013637	.0034697	.0079414	.0165216	.0315266	.0556175	.0913487	.1405709
33	.0006459	.0017540	.0042867	.0094177	.0189256	.0353206	.0609758	.0983361
34	.0003240	.0008524	.0021309	.0045160	.0091232	.0174158	.0326266	.0564428
35	.0001286	.0003984	.0010984	.0027276	.0061582	.0127480	.0243735	.0433285
36	.0000541	.0001791	.0005359	.0013865	.0033143	.0072484	.0145932	.0272601
37	.0000219	.0000775	.0002424	.0006786	.0017184	.0039689	.0084856	.0165519
38	.0000085	.0000323	.0001075	.0003193	.0008561	.0020257	.0044916	.0096374
39	.0000032	.0000129	.0000460	.0001453	.0004133	.0010066	.0023135	.0050439
40	.0000012	.0000050	.0000189	.0000636	.0001918	.0005236	.0013051	.0030906
41	.0000004	.0000019	.0000075	.0000269	.0000858	.0002478	.0006521	.0015743
42	.0000001	.0000007	.0000029	.0000109	.0000370	.0001131	.0003144	.0007958
43		.0000004	.0000011	.0000043	.0000154	.0000498	.0001452	.0003932
44		.0000001	.0000004	.0000016	.0000052	.0000167	.0000536	.0001356
45			.0000001	.0000006	.0000024	.0000087	.0000284	.0000848
46				.0000002	.0000009	.0000034	.0000119	.0000374
47				.0000001	.0000003	.0000013	.0000048	.0000159
48					.0000001	.0000005	.0000021	.0000076
49						.0000002	.0000007	.0000026
50						.0000001	.0000003	.0000010
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$$P(r, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 111

	.41	.42	.43	.44	.45	.46	.47	.48
22	.99999994	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
23	.99999982	.99999994	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
24	.99999951	.99999982	.99999993	.99999998	1.00000000	1.00000000	1.00000000	1.00000000
25	.99999872	.99999949	.99999981	.99999993	.99999998	.99999999	1.00000000	1.00000000
26	.99999679	.99999869	.99999948	.99999980	.99999993	.99999997	.99999999	1.00000000
27	.99999237	.99999675	.99999867	.99999948	.99999980	.99999993	.99999997	.99999999
28	.99988250	.99999234	.99999674	.99999866	.99999947	.99999980	.99999993	.99999997
29	.99966273	.99988276	.99999236	.99999675	.99999867	.99999948	.99999980	.99999993
30	.99922242	.99962290	.99982292	.99992244	.99996278	.99999668	.99999948	.99999980
31	.9984623	.9992359	.9996346	.9998319	.9999256	.9999684	.9999871	.9999949
32	.9970789	.9984221	.9992309	.9996420	.9998350	.999873	.9999692	.9999744
33	.9946755	.9971455	.9982272	.9992939	.9996510	.9998399	.9998739	.9999707
34	.9906772	.9948112	.9972203	.9985672	.9992897	.9996615	.9998450	.9999319
35	.9843032	.9909334	.9924958	.9973024	.9986116	.9993130	.9996733	.9998708
36	.9745584	.9847555	.9921204	.9951161	.9973910	.9986598	.9993384	.9996863
37	.9602628	.9753113	.9852265	.9914893	.9952826	.9974881	.9987113	.9993656
38	.9401325	.9641866	.9768489	.9871737	.9947359	.9978569	.9987657	.9993657
39	.9128738	.9418999	.9636551	.9766742	.9861147	.9902978	.9956376	.9978738
40	.8774272	.9154028	.9436916	.9638789	.9776825	.9867272	.9924066	.9956238
41	.8330889	.8800653	.9179411	.9454971	.9651168	.9785010	.9872492	.9927277
42	.7797326	.8375554	.8843013	.9204862	.9473132	.9653657	.9793891	.9877185
43	.7179358	.7852848	.8420087	.8877339	.9230356	.9491378	.9676833	.9818144
44	.6490235	.7245470	.7658049	.8166139	.8612166	.8986661	.9307661	.9578738
45	.5750204	.6565474	.7311132	.7962972	.8508580	.8945827	.9281374	.9527972
46	.4984500	.5832881	.6640668	.7376382	.8017761	.8552598	.8979958	.9306851
47	.42281053	.5071455	.5914971	.6715102	.7441254	.8071986	.8596451	.9013994
48	.3487340	.4308912	.5157852	.5996537	.6789090	.7505779	.8126112	.8640138
49	.2807511	.3572664	.4396305	.52343756	.6077639	.6852680	.7569988	.8180000
50	.2200118	.2887191	.3657662	.4483293	.5299230	.6158334	.6935916	.7633906
51	.1676726	.2271684	.2967606	.3742384	.4569934	.5414335	.6238673	.7008839
52	.1241698	.1738577	.2343254	.3046096	.3826880	.4656289	.5499133	.6319719
53	.0892880	.1293143	.1800573	.2414846	.3125396	.3911201	.4742416	.5583680
54	.0623041	.0934307	.1344835	.1862715	.2486475	.3206463	.3995397	.4885378
55	.0421635	.0654794	.0975567	.1397673	.1925008	.2558176	.3283876	.4079319
56	.0276585	.0453204	.0660686	.0917345	.1248816	.1697457	.2233959	.2836314
57	.0175788	.0293342	.0469074	.0719231	.1059387	.1501289	.2050071	.2701856
58	.0108201	.0181385	.0310540	.0493217	.0751864	.1101677	.1538875	.2118663
59	.0064472	.0115688	.0199192	.0327882	.0517607	.0784743	.1144198	.1606673
60	.0037475	.0069380	.0123735	.0211186	.0345433	.0542218	.0817845	.1186537
61	.0020735	.0040191	.0074401	.0131732	.0223347	.0363169	.0567038	.0851149
62	.0011183	.0022520	.0043285	.0079522	.0139833	.0235649	.0381063	.0598003
63	.0005830	.0012200	.0024355	.0046445	.0084728	.0148004	.0248078	.0399091
64	.0002937	.0006308	.0013248	.0026232	.0049662	.0090005	.0156344	.0260590
65	.0001429	.0003232	.0006964	.0014321	.0028144	.0052923	.0095336	.0164705
66	.0000671	.0001579	.0003536	.0007553	.0015413	.0030082	.0056217	.0100705
67	.0000305	.0000735	.0001733	.0003847	.0008154	.0016521	.0032038	.0059531
68	.0000133	.0000339	.0000820	.0001892	.0004165	.0008762	.0017638	.0034004
69	.0000056	.0000149	.0000374	.0000897	.0002053	.0004486	.0009374	.0018757
70	.0000023	.0000063	.0000165	.0000411	.0000996	.0002215	.0004808	.0009986
71	.0000009	.0000026	.0000070	.0000181	.0000447	.0001055	.0002378	.0005128
72	.0000003	.0000010	.0000029	.0000077	.0000198	.0000484	.0001121	.0002537
73	.0000001	.0000004	.0000011	.0000031	.0000084	.0000214	.0000531	.0001211
74		.0000001	.0000004	.0000012	.0000034	.0000091	.0000230	.0000556
75			.0000002	.0000005	.0000014	.0000037	.0000098	.0000246
76			.0000001	.0000002	.0000005	.0000015	.0000040	.0000104
77				.0000001	.0000002	.0000006	.0000016	.0000043
78					.0000001	.0000002	.0000007	.0000017
79						.0000001	.0000002	.0000006
80							.0000001	.0000002
81								.0000001

δp	.45	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
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11	1.00000000	1.00000000
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18	1.00000000	1.00000000
19	1.00000000	1.00000000
20	1.00000000	1.00000000
21	1.00000000	1.00000000
22	1.00000000	1.00000000
23	1.00000000	1.00000000
24	1.00000000	1.00000000
25	1.00000000	1.00000000
26	1.00000000	1.00000000
27	1.00000000	1.00000000
28	.99999999	1.00000000
29	.99999997	.99999999
30	.99999993	.99999998
31	.99999981	.99999993
32	.99999951	.99999963
33	.99999879	.99999893

$$P(c, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

$$n = 111$$

$\frac{n}{2}$	.49	.50
34	.9999712	.9999884
35	.99999346	.9999725
36	.9998573	.9999377
37	.9997003	.9998641
38	.9993944	.9997149
39	.9988223	.9994345
40	.9977935	.9988808
41	.9960141	.9979028
42	.9935037	.9962876
43	.9893131	.9933832
44	.9810044	.9888510
45	.9701521	.9818468
46	.9546279	.9714182
47	.9332375	.9564854
48	.9047918	.9357625
49	.8683645	.9081714
50	.8233659	.8726774
51	.7697559	.8287697
52	.7081488	.7760769
53	.6398512	.7157899
54	.5668034	.6478103
55	.4914214	.5752249
56	.4163620	.5000000
57	.3442460	.4247731
58	.2773893	.3521897
59	.2178844	.2846101
60	.1659681	.2239031
61	.1229883	.1712903
62	.0884636	.1273026
63	.0617129	.0918286
64	.0417227	.0642377
65	.0273180	.0435446
66	.0173108	.0285818
67	.0106096	.0181532
68	.0062853	.0114990
69	.0035949	.0066168
70	.0019872	.0037924
71	.0010393	.0020972
72	.0005445	.0011192
73	.0002697	.0005755
74	.0001387	.0002851
75	.00006591	.0001359
76	.0000261	.0000623
77	.0000111	.0000273
78	.0000045	.0000116
79	.0000018	.0000047
80	.0000007	.0000018
81	.0000002	.0000007
82	.0000001	.0000002
83		.0000001

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$$P(r, n, p) = \sum_{i=0}^n \binom{n}{i} p^i (1-p)^{n-i}$$

n = 112

	.01	.02	.03	.04	.05	.06	.07	.08
1	.6755545	.8959312	.9670061	.9896634	.9968008	.9990220	.9997048	.9999120
2	.3085050	.4580597	.6827178	.8414259	.9779422	.9920307	.9972164	.9990855
3	.1027348	.1866338	.2853425	.4290766	.5999177	.7975635	.9282132	.9799171
4	.0265236	.0703226	.1340757	.2454542	.4165476	.6092976	.8117414	.9317414
5	.0055463	.0174021	.0465843	.1065957	.2364079	.4609474	.7526864	.9505098
6	.0009695	.0025477	.0061332	.0148032	.0340747	.0669466	.1160281	.1891847
7	.0001450	.0004897	.0012561	.0031998	.0078091	.0172050	.0381096	.0750815
8	.0000109	.0003308	.0008964	.0022524	.0053774	.0128394	.0281096	.0581096
9	.0000023	.0000418	.0001231	.0003104	.0007285	.0016255	.0034244	.0073099
10	.0000002	.0000096	.0000269	.0000694	.0001538	.0003556	.0007479	.0014702
11		.0000016	.0000574	.0001374	.0003174	.0007352	.0016078	.0034985
12		.0000002	.0000145	.0000364	.0000816	.0001872	.0004179	.0009135
13		.0000004	.0000038	.0000094	.0000214	.0000462	.0001015	.0002172
14		.0000001	.0000007	.0000016	.0000036	.0000078	.0000165	.0000354
15			.0000001	.0000002	.0000004	.0000009	.0000019	.0000041
16			.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
17				.0000000	.0000000	.0000000	.0000000	.0000000
18				.0000000	.0000000	.0000000	.0000000	.0000000
19				.0000000	.0000000	.0000000	.0000000	.0000000
20				.0000000	.0000000	.0000000	.0000000	.0000000
21					.0000000	.0000000	.0000000	.0000000
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57						.0000000	.0000000	.0000000
58						.0000000	.0000000	.0000000
59						.0000000	.0000000	.0000000
60						.0000000	.0000000	.0000000
61						.0000000	.0000000	.0000000
62						.0000000	.0000000	.0000000
63						.0000000	.0000000	.0000000
64						.0000000	.0000000	.0000000
65						.0000000	.0000000	.0000000
66						.0000000	.0000000	.0000000
67						.0000000	.0000000	.0000000
68						.0000000	.0000000	.0000000
69						.0000000	.0000000	.0000000
70						.0000000	.0000000	.0000000
71						.0000000	.0000000	.0000000
72						.0000000	.0000000	.0000000
73						.0000000	.0000000	.0000000
74						.0000000	.0000000	.0000000
75						.0000000	.0000000	.0000000
76						.0000000	.0000000	.0000000
77						.0000000	.0000000	.0000000
78						.0000000	.0000000	.0000000
79						.0000000	.0000000	.0000000
80						.0000000	.0000000	.0000000
81						.0000000	.0000000	.0000000
82						.0000000	.0000000	.0000000
83						.0000000	.0000000	.0000000
84						.0000000	.0000000	.0000000
85						.0000000	.0000000	.0000000
86						.0000000	.0000000	.0000000
87						.0000000	.0000000	.0000000
88						.0000000	.0000000	.0000000
89						.0000000	.0000000	.0000000
90						.0000000	.0000000	.0000000
91						.0000000	.0000000	.0000000
92						.0000000	.0000000	.0000000
93						.0000000	.0000000	.0000000
94						.0000000	.0000000	.0000000
95						.0000000	.0000000	.0000000
96						.0000000	.0000000	.0000000
97						.0000000	.0000000	.0000000
98						.0000000	.0000000	.0000000
99						.0000000	.0000000	.0000000
100						.0000000	.0000000	.0000000
101						.0000000	.0000000	.0000000
102						.0000000	.0000000	.0000000
103						.0000000	.0000000	.0000000
104						.0000000	.0000000	.0000000
105						.0000000	.0000000	.0000000
106						.0000000	.0000000	.0000000
107						.0000000	.0000000	.0000000
108						.0000000	.0000000	.0000000
109						.0000000	.0000000	.0000000
110						.0000000	.0000000	.0000000
111						.0000000	.0000000	.0000000
112						.0000000	.0000000	.0000000

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$$H(n, k, T) = \sum_{j=0}^n \binom{n}{j} T^j (1-T)^{n-j}$$

n = 112

$\frac{k}{n}$.42	.50
33	.00000014	.00000007
34	.00000044	.00000018
35	.00000086	.00000040
36	.00000058	.00000051
37	.00000077	.00000067
38	.00000083	.00000078
39	.00000087	.00000087
40	.00000090	.00000094
41	.00000092	.00000098
42	.00000093	.00000100
43	.00000094	.00000101
44	.00000094	.00000101
45	.00000094	.00000101
46	.00000094	.00000101
47	.00000094	.00000101
48	.00000094	.00000101
49	.00000094	.00000101
50	.00000094	.00000101
51	.00000094	.00000101
52	.00000094	.00000101
53	.00000094	.00000101
54	.00000094	.00000101
55	.00000094	.00000101
56	.00000094	.00000101
57	.00000094	.00000101
58	.00000094	.00000101
59	.00000094	.00000101
60	.00000094	.00000101
61	.00000094	.00000101
62	.00000094	.00000101
63	.00000094	.00000101
64	.00000094	.00000101
65	.00000094	.00000101
66	.00000094	.00000101
67	.00000094	.00000101
68	.00000094	.00000101
69	.00000094	.00000101
70	.00000094	.00000101
71	.00000094	.00000101
72	.00000094	.00000101
73	.00000094	.00000101
74	.00000094	.00000101
75	.00000094	.00000101
76	.00000094	.00000101
77	.00000094	.00000101
78	.00000094	.00000101
79	.00000094	.00000101
80	.00000094	.00000101
81	.00000094	.00000101
82	.00000094	.00000101
83	.00000094	.00000101
84	.00000094	.00000101

n • 113

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$$f_{\text{res}, \text{res}} = \sum_{i=1}^n \left(\frac{r_i}{r_i + 1} \right)^{r_i} (1 - f_{\text{res}, \text{res}})^{r_i + 1}$$

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$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 113

	.25	.26	.27	.28	.29	.30	.31	.32
56		.0000001	.0000003	.0000010	.0000034	.0000103	.0000295	.0000787
57			.0000001	.0000004	.0000013	.0000043	.0000129	.0000360
58				.0000001	.0000005	.0000017	.0000055	.0000160
59				.0000001	.0000002	.0000007	.0000022	.0000068
60					.0000001	.0000003	.0000009	.0000028
61						.0000001	.0000003	.0000011
62							.0000001	.0000004
63								.0000002
64								.0000001
	.33	.34	.35	.36	.37	.38	.39	.40
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
14	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
15	.9999996	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
16	.9999986	.9999995	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
17	.9999957	.9999984	.9999994	.9999998	.9999999	1.0000000	1.0000000	1.0000000
18	.9999874	.9999951	.9999982	.9999994	.9999998	.9999999	1.0000000	1.0000000
19	.9999656	.9999862	.9999947	.9999980	.9999993	.9999998	.9999999	1.0000000
20	.9999119	.9999632	.9999852	.9999942	.9999978	.9999992	.9999997	.9999999
21	.9997876	.9999074	.9999611	.9999842	.9999938	.9999977	.9999992	.9999997
22	.9995165	.9997802	.9997037	.9995933	.9997834	.9999935	.9999975	.9999991
23	.9992582	.9995062	.9997745	.9999007	.9999579	.9999828	.9999932	.9999974
24	.9987701	.9989476	.9994991	.9997703	.9998986	.9999568	.9999823	.9999930
25	.9984604	.9978685	.9989431	.9994953	.9997678	.9998972	.9999561	.9999820
26	.9983365	.9958896	.9978774	.9989445	.9994946	.9997669	.9998965	.9999558
27	.9984621	.9924392	.9959350	.9978959	.9989514	.9994960	.9997676	.9998966
28	.9977138	.9967117	.9925649	.9959952	.9979234	.9989634	.9995019	.9997695
29	.9963049	.9975495	.9865914	.9927115	.9940690	.9979592	.9989803	.9995075
30	.9942673	.9939662	.9781949	.9872977	.9926770	.9946155	.9980025	.9990013
31	.9914537	.9942288	.9649325	.9787709	.9876278	.9930592	.9962523	.9980526
32	.9875633	.9917005	.9458122	.9655292	.9793738	.9879788	.9932563	.9963792
33	.9830826	.9810691	.9194300	.9474190	.9669518	.9799997	.9883479	.9934664
34	.9774324	.9756287	.8845611	.9218624	.9490447	.9679959	.9806453	.9887327
35	.9708840	.9780543	.8403834	.8880574	.9242992	.9506853	.9690578	.9813072
36	.9636045	.9716504	.7966904	.8450917	.8914959	.9267365	.9523360	.9701337
37	.9558386	.9645075	.7240487	.7927517	.8497542	.8949348	.9291723	.9539941
38	.9478788	.9568943	.6538534	.7311820	.7987365	.8543712	.8993523	.9316023
39	.9402875	.9489258	.5782586	.6625537	.7388110	.8046481	.8509431	.8957465
40	.9325989	.9412035	.4997799	.5879917	.6711296	.7460415	.8104891	.8634699
41	.9258285	.9366553	.4220022	.5104005	.5975932	.6795891	.7531784	.8162620
42	.9189218	.9282781	.3472432	.4326914	.5206974	.6070718	.6879391	.7602267
43	.9148788	.9208930	.2782348	.3577575	.4432785	.5308786	.6164357	.6961863
44	.9108026	.9165296	.2168003	.2881604	.3682031	.4537708	.5409522	.6256928
45	.9050735	.9114342	.1643214	.2258789	.3080568	.3905850	.4641750	.5509258
46	.9013947	.9081131	.1209266	.1721611	.2348881	.3079266	.3889082	.4744979
47	.9034583	.9058614	.0863850	.1274956	.1800459	.2430078	.3177722	.3991776
48	.9023050	.9037260	.0598710	.0916764	.1311311	.1879738	.2529385	.3275967
49	.9013697	.9024043	.0402404	.0619741	.0970531	.1408359	.1959433	.2619803
50	.9008201	.9015953	.0262186	.0433033	.0681666	.1025111	.1476051	.2039832
51	.9047935	.9091130	.0165544	.0284204	.0464513	.0724447	.1080470	.1544363
52	.9037041	.9053810	.0101261	.0180790	.0306971	.0496810	.0768049	.1136576
53	.9034768	.9030612	.0059991	.0111332	.0196652	.0330459	.0528892	.0812438
54	.9007799	.9016157	.0034414	.0066530	.0122083	.0213113	.0354644	.0563729
55	.9003985	.9008983	.0017111	.0030466	.0073422	.0133199	.0250151	.0379499
56	.9001970	.9004433	.0010273	.0021532	.0042765	.0080659	.0144769	.0247747
57	.9000942	.9002311	.0005343	.0011666	.0024116	.0047303	.0088230	.0156776
58	.9000436	.9001115	.0002689	.0006117	.0013154	.0026861	.0052083	.0096128
59	.9000195	.9000524	.0001309	.0003103	.0006954	.0014766	.0029769	.0057091
60	.9000084	.9000235	.0000616	.0001525	.0003554	.0007855	.0016470	.0032830
61	.9000035	.9000103	.0000280	.0000723	.0001757	.0004042	.0008818	.0018274
62	.9000014	.9000043	.0000123	.0000331	.0000840	.0002012	.0004567	.0009842
63	.9000006	.9000018	.0000052	.0000147	.0000388	.0000968	.0002388	.0005128
64	.9000002	.9000007	.0000022	.0000063	.0000173	.0000430	.0001108	.0002583
65	.9000001	.9000003	.0000009	.0000026	.0000075	.0000203	.0000518	.0001258
66		.9000001	.0000003	.0000010	.0000031	.0000088	.0000234	.0000599
67			.0000001	.0000004	.0000013	.0000037	.0000102	.0000269
68				.0000002	.0000005	.0000015	.0000043	.0000118
69				.0000001	.0000002	.0000006	.0000018	.0000050
70					.0000001	.0000002	.0000007	.0000020
71						.0000001	.0000003	.0000008
72							.0000001	.0000003
73								.0000001
	.41	.42	.43	.44	.45	.46	.47	.48
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 113

	.41	.42	.43	.44	.45	.46	.47	.48
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
14	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
15	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
16	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
17	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
18	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
19	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
20	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
21	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
22	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
23	.99999991	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
24	.99999973	.99999997	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
25	.99999929	.99999973	.99999990	.99999996	.99999999	1.00000000	1.00000000	1.00000000
26	.99999818	.99999928	.99999973	.99999990	.99999996	.99999999	1.00000000	1.00000000
27	.99999550	.99999818	.99999973	.99999990	.99999996	.99999999	.99999999	1.00000000
28	.99999751	.99999561	.99999918	.99999928	.99999973	.99999990	.99999997	.99999999
29	.99997730	.99999829	.99999567	.99999822	.99999973	.99999973	.99999990	.99999997
30	.99995196	.99997777	.99999011	.99995577	.99999826	.99999931	.99999974	.99999991
31	.99990264	.99995318	.99997834	.99999037	.99999589	.99999831	.99999934	.99999978
32	.99981088	.99990350	.99995459	.99997703	.99999169	.99999555	.99999831	.99999978
33	.99964748	.99981703	.99990867	.99995617	.99997797	.99999105	.99999619	.99999848
34	.99936877	.99965978	.99983264	.99991311	.99995791	.99998064	.99999145	.99999838
35	.98911305	.99391815	.99672711	.99983064	.99991577	.99995976	.99998158	.99999188
36	.98198825	.98995392	.99415711	.99988616	.99983797	.99991963	.99995178	.99998850
37	.97122011	.98266863	.98999265	.99440021	.99970004	.99995555	.99998577	.99999379
38	.95358888	.97331318	.98341818	.99080033	.99938013	.99997149	.99999338	.99999703
39	.93402240	.95733178	.97341118	.99406044	.99900807	.99949049	.99978864	.99996133
40	.90511558	.93643466	.95899770	.97481112	.99847618	.99912397		

χ^2	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	1.00000000	1.00000000
19	1.00000000	1.00000000

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 113

	.49	.50
19	1.00000000	1.00000000
20	1.00000000	1.00000000
21	1.00000000	1.00000000
22	1.00000000	1.00000000
23	1.00000000	1.00000000
24	1.00000000	1.00000000
25	1.00000000	1.00000000
26	1.00000000	1.00000000
27	1.00000000	1.00000000
28	1.00000000	1.00000000
29	.99999999	1.00000000
30	.99999997	.99999999
31	.99999991	.99999997
32	.99999976	.99999991
33	.99999939	.99999977
34	.99999853	.99999943
35	.99999657	.99999861
36	.99999233	.99999670
37	.99998350	.99999280
38	.99996384	.99998452
39	.99991921	.99996796
40	.99986721	.99993612
41	.99975777	.99987721
42	.99956713	.99977232
43	.99925513	.99952822
44	.99875503	.9992563
45	.99799365	.99882330
46	.99687199	.99809907
47	.99527890	.99708846
48	.99309696	.99550828
49	.99021445	.99340379
50	.98554066	.99069006
51	.98022261	.98705690
52	.97666037	.98265834
53	.97051764	.97740734
54	.96272467	.97136718
55	.95473553	.96455589
56	.94699971	.95745680
57	.94156284	.95000000
58	.93441716	.94254377
59	.92778863	.93534712
60	.92195182	.92863123
61	.91718222	.92259266
62	.91432779	.91734486
63	.91297951	.91294310
64	.91293363	.90979994
65	.91427757	.90689621
66	.91681737	.90441772
67	.91957105	.90237154
68	.92193358	.90080893
69	.92465643	.90117670
70	.92632237	.90070437
71	.92813224	.90040748
72	.92911482	.90022768
73	.92959666	.90012279
74	.92989990	.90006358
75	.92991444	.90003204
76	.92996472	.90001548
77	.92995301	.90000720
78	.92990130	.90000332
79	.92980034	.90000139
80	.92965081	.90000057
81	.92945008	.90000027
82	.92920003	.90000009
83	.92890001	.90000000
84		.90000000

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$$F(c, n, p) = \sum_{x=c}^n \binom{n}{x} p^x (1-p)^{n-x}$$

n = 114

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.4520100	.7300533	.9289740	.9904738	.9971137	.9991359	.9997447	.9999256
2	.1158417	.4775211	.8595019	.9452232	.9797019	.9904810	.9955540	.9981276
3	.0166863	.1293043	.4682303	.8386993	.9282735	.9701715	.9883778	.9955821
4	.0080608	.0481132	.1447400	.4729938	.8270503	.9161340	.9620589	.9837923
5	.0059714	.0294227	.0878553	.2578553	.6792111	.8204186	.9073788	.9553913
6	.0010526	.0054796	.0219035	.0857642	.2508020	.6660097	.8168338	.9010589
7	.0001519	.0008221	.0035486	.0128237	.0443546	.1301525	.3308226	.6158295
8	.0000215	.0001501	.0007064	.0027166	.0091461	.0266541	.0749246	.1700794
9	.0000025	.0000103	.0000564	.0002327	.0008556	.0245674	.0404564	.0661549
10	.0000003	.0000015	.0000086	.0000358	.0001390	.0005490	.0134865	.0306393
11		.0000019	.0000068	.0000234	.0000833	.0003194	.0009467	.0023730
12		.0000031	.0000121	.0000438	.0001686	.0006155	.0018595	.0048050
13		.0000055	.0000209	.0000762	.0002847	.0010424	.0030973	.0079896
14		.0000081	.0000309	.0001142	.0004139	.0014900	.0046384	.0123100
15		.0000018	.0000088	.0000326	.0001197	.0004358	.0013465	.0038633
16			.0000007	.0000033	.0000133	.0000435	.0001335	.0003837
17			.0000001	.0000001	.0000005	.0000015	.0000045	.0000134
18				.0000007	.0000002	.0000005	.0000015	.0000044
19				.0000001	.0000001	.0000001	.0000001	.0000001
20					.0000001	.0000001	.0000001	.0000001
21						.0000001	.0000001	.0000001
22							.0000001	.0000001
23								.0000001
24								.0000001
25								.0000001
26								.0000001
27								.0000001
28								.0000001
29								.0000001
30								.0000001
31								.0000001
32								.0000001
33								.0000001
34								.0000001
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$$P(x, n, p) = \sum_{i=0}^n \binom{n}{i} p^i (1-p)^{n-i}$$

n = 214

	.17	.18	.19	.20	.21	.22	.23	.24
21	.3804219	.4914990	.6001208	.6989467	.7830559	.8503271	.9010881	.9373454
22	.2913003	.3961621	.5053264	.6112772	.7072374	.7887351	.8539066	.9031314
23	.2150692	.3076954	.4113300	.5106264	.6280399	.7452985	.8533008	.9515048
24	.1522052	.2300174	.3231388	.4259756	.5314500	.6324469	.7331494	.8298460
25	.1033846	.1653646	.2446957	.3381504	.4401435	.5438417	.6425311	.7308072
26	.0673868	.1142731	.1784573	.2591077	.3527667	.4538774	.5584009	.6532209
27	.0421483	.0752826	.1252716	.1914654	.2732597	.3670105	.4672007	.5674794
28	.0253001	.0484162	.0846102	.1363495	.2043760	.2871593	.3699063	.4801573
29	.0145770	.0296826	.0549747	.0935362	.1474815	.2171798	.3008156	.3944765
30	.0080665	.0174876	.0343598	.0617953	.1026315	.1586470	.2298710	.3148362
31	.0042858	.0090930	.0206589	.0393122	.0688521	.1118708	.1698294	.2424460
32	.0021882	.0053916	.0119506	.0240817	.0445210	.0761213	.1232373	.1813144
33	.0010739	.0028229	.0066524	.0142056	.0277452	.0499680	.0815815	.1230970
34	.0005068	.0014219	.0035642	.0080705	.0166443	.0316383	.0556361	.0912136
35	.0002300	.0006892	.0018165	.0044165	.0096469	.0193218	.0387498	.0615093
36	.0001005	.0003216	.0009132	.0023885	.0053832	.0113814	.0221725	.0400686
37	.0000423	.0001445	.0004370	.0011830	.0028961	.0064668	.0132729	.0252105
38	.0000171	.0000625	.0002015	.0005793	.0015023	.0035446	.0076687	.0147593
39	.0000067	.0000261	.0000895	.0002735	.0007516	.0018744	.0042768	.0089900
40	.0000025	.0000105	.0000363	.0001245	.0003627	.0009565	.0023024	.0050950
41	.0000009	.0000041	.0000158	.0000547	.0001689	.0004710	.0011966	.0027888
42	.0000003	.0000015	.0000063	.0000232	.0000759	.0002239	.0006004	.0014743
43	.0000001	.0000005	.0000024	.0000095	.0000329	.0001027	.0002909	.0007359
44		.0000002	.0000009	.0000037	.0000138	.0000455	.0001361	.0003714
45		.0000001	.0000003	.0000014	.0000056	.0000195	.0000615	.0001770
46			.0000001	.0000005	.0000022	.0000080	.0000269	.0000815
47				.0000002	.0000008	.0000032	.0000113	.0000362
48				.0000001	.0000003	.0000012	.0000046	.0000158
49					.0000001	.0000005	.0000019	.0000066
50						.0000002	.0000007	.0000026
51						.0000001	.0000003	.0000010
52							.0000001	.0000004
53								.0000001

	.25	.26	.27	.28	.29	.30	.31	.32
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	.9999994	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	.9999973	.9999991	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
11	.9999909	.9999967	.9999989	.9999996	.9999999	1.0000000	1.0000000	1.0000000
12	.9999702	.9999887	.9999959	.9999985	.9999995	.9999998	.9999999	1.0000000
13	.9999108	.9999643	.9999864	.9999942	.9999982	.9999994	.9999998	.9999999
14	.9997554	.9998979	.9999588	.9999840	.9999940	.9999978	.9999998	.9999997
15	.9993819	.9997269	.9998653	.9999332	.9999815	.9999930	.9999974	.9999991
16	.9985519	.9993311	.9997040	.9998733	.9999477	.9999791	.9999920	.9999970
17	.9968399	.9984726	.9993891	.9996812	.9998622	.9999425	.9999769	.9999910
18	.9935502	.9978998	.9984046	.9992505	.9996608	.9998520	.9999377	.9999747
19	.9876410	.9934299	.9966415	.9983479	.9992175	.9996429	.9998329	.9999334
20	.9776866	.9875719	.9933467	.9965744	.9983026	.9991901	.9996877	.9998351
21	.9619306	.9777952	.9875582	.9932983	.9965277	.9982684	.9991686	.9996154
22	.9384187	.9624193	.9779749	.9875955	.9932833	.9965003	.9982451	.9991587
23	.9052883	.9395821	.9629913	.9782303	.9876793	.9932970	.9964913	.9982322
24	.8611144	.9074867	.9408238	.9636366	.9785248	.9878084	.9933395	.9964995
25	.8058835	.8647288	.9097361	.9421329	.9643472	.9788622	.9879704	.9934077
26	.7388865	.8104467	.8683426	.9120274	.9435001	.9651145	.9792866	.9881700
27	.6618419	.7456084	.8159336	.8719310	.9143525	.9449167	.9655316	.9797327
28	.5787894	.6711137	.7527601	.8211547	.8753499	.9167044	.9463758	.9677918
29	.4927716	.5897967	.6801577	.7597757	.8263050	.8791357	.9190766	.9478699
30	.4077484	.5050693	.6005248	.6889901	.7666562	.8313882	.8827851	.9214636
31	.3274371	.4207237	.5170739	.6109948	.6976260	.7734092	.8364060	.8862352
32	.2549033	.3404225	.4334386	.5288061	.6212254	.7060787	.7800419	.8433395
33	.1921917	.2672426	.3538046	.4459041	.5402853	.6312337	.7143604	.7865604
34	.1408488	.2033525	.2794632	.3657933	.4581360	.5515206	.6410347	.7248415
35	.0999001	.1498738	.2144902	.2915731	.3781987	.4701490	.5625519	.6506423
36	.0675724	.1069256	.1595802	.2255995	.3035491	.3904302	.4819568	.5733698
37	.0445837	.0738117	.1149767	.1692980	.2366769	.3154566	.4024772	.4935720
38	.0284294	.0483847	.0808143	.1231409	.1790789	.2477198	.3272394	.4144086
39	.0175183	.0318287	.0541414	.0867686	.1314079	.1888958	.2587266	.3369815
40	.0104306	.0198667	.0353835	.0592044	.0934639	.1397680	.1987130	.2676966
41	.0060009	.0119903	.0223612	.0391085	.0644046	.1002903	.1482139	.2086157
42	.0033356	.0065952	.0126613	.0249920	.0429920	.0677532	.1017353	.1471364
43	.0017918	.0039433	.0080796	.0154626	.0277736	.0470069	.0752435	.1143030
44	.0009300	.0021508	.0046186	.0092534	.0177723	.0306386	.0511730	.0808670
45	.0004664	.0011334	.0025531	.0053570	.0105169	.0193951	.0337841	.0544771
46	.0002361	.0005774	.0013646	.0029999	.0061611	.0118695	.0215290	.0368911
47	.0001209	.0003083	.0007653	.0016249	.0034925	.0067031	.0123103	.0217713
48	.0000679	.0001633	.0003853	.0008413	.0017955	.0034917	.0067989	.0124390
49	.0000310	.0000783	.0001703	.0004114	.0010164	.0020837	.0040183	.0079710
50	.0000089	.0000277	.0000796	.0002114	.0005217	.0010803	.00215910	.0043526
51	.0000036	.0000119	.0000360	.0001002	.0002591	.0006242	.0014069	.0029774
52	.0000014	.0000050	.0000157	.0000489	.0001244	.0003138	.0007393	.0016338
53	.0000008	.0000029	.0000096	.0000284	.0000718	.0001818	.0004389	.0010867
54	.0000004	.0000016	.0000057	.0000167	.0000420	.0001071	.0002615	.0006450
55	.0000001	.0000005	.0000017	.0000053	.0000133	.0000327	.0000800	.0002019
56		.0000001	.0000004	.0000015	.0000047	.0000114	.0000285	.0000710
57			.0000002	.0000006	.0000019	.0000046	.0000118	.0000297
58			.0000001	.0000003	.0000010	.0000028	.0000070	.0000178
59				.0000001	.0000003	.0000010	.0000028	.0000070
60					.0000001	.0000004	.0000013	.0000034

AMCP 706-109

$$P(n, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 114

x	.49	.50
83	1.0000000	1.0000000
84	1.0000000	1.0000000
85	1.0000000	1.0000000
86	1.0000000	1.0000000
87	1.0000000	1.0000000
88	1.0000000	1.0000000
89	.9999999	1.0000000
90	.9999998	.9999999
91	.9999994	.9999998
92	.9999983	.9999994
93	.9999957	.9999984
94	.9999895	.9999960
95	.9999753	.9999908
96	.9999441	.9999770
97	.9998782	.9999479
98	.9997449	.9998866
99	.9994853	.9997624
40	.9989993	.9995804
41	.9981837	.9990666
42	.9965055	.9982477
43	.9940700	.9968242
44	.9899911	.9944407
45	.9836673	.9905946
46	.9742160	.9846118
47	.9605951	.9756377
48	.9416611	.9628537
49	.9162688	.9445303
50	.8834081	.9201149
51	.8423645	.8803848
52	.7928787	.8405612
53	.7352758	.8003134
54	.6705338	.7438726
55	.6002674	.6801153
56	.5266191	.6105620
57	.4520693	.5372835
58	.3791845	.4623717
59	.3103661	.3894380
60	.2476086	.3198847
61	.1923368	.2561274
62	.1453265	.1996866
63	.1067162	.1514388
64	.0760971	.1116152
65	.0526544	.0798808
66	.0353287	.0554697
67	.0229701	.0373463
68	.0144634	.0243633
69	.0088143	.0153882
70	.0051960	.0094054
71	.0029611	.0055593
72	.0016305	.0031758
73	.0008669	.0017523
74	.0004448	.0009334
75	.0002202	.0004796
76	.0001050	.0002376
77	.0000463	.0001134
78	.0000214	.0000521
79	.0000091	.0000230
80	.0000037	.0000098
81	.0000015	.0000040
82	.0000006	.0000016
83	.0000002	.0000008
84	.0000001	.0000002
85		.0000001

$$P(c, n, r) = \sum_{k=0}^n \binom{n}{k} 1^k (1-r)^{n-k}$$

c = 135

λ	.01	.02	.03	.04	.05	.06	.07	.08
1	.9811908	.980813	.980437	.980061	.979685	.979309	.978933	.978557
2	.9519304	.951717	.951504	.951291	.951078	.950865	.950652	.950439
3	.9108941	.910760	.910626	.910492	.910358	.910224	.910090	.909956
4	.8586489	.858599	.858550	.858501	.858452	.858403	.858354	.858305
5	.8061983	.806173	.806148	.806123	.806098	.806073	.806048	.806023
6	.7531117	.753086	.753061	.753036	.753011	.752986	.752961	.752936
7	.7000709	.700045	.700020	.700000	.699975	.699950	.699925	.699900
8	.6469829	.646957	.646932	.646907	.646882	.646857	.646832	.646807
9	.5938949	.593869	.593844	.593819	.593794	.593769	.593744	.593719
10	.5408069	.540781	.540756	.540731	.540706	.540681	.540656	.540631
11	.4877189	.487693	.487668	.487643	.487618	.487593	.487568	.487543
12	.4346309	.434605	.434580	.434555	.434530	.434505	.434480	.434455
13	.3815429	.381517	.381492	.381467	.381442	.381417	.381392	.381367
14	.3284549	.328429	.328404	.328379	.328354	.328329	.328304	.328279
15	.2753669	.275341	.275316	.275291	.275266	.275241	.275216	.275191
16	.2222789	.222253	.222228	.222203	.222178	.222153	.222128	.222103
17	.1691909	.169165	.169140	.169115	.169090	.169065	.169040	.169015
18	.1161029	.116077	.116052	.116027	.116002	.115977	.115952	.115927
19	.0630149	.062989	.062964	.062939	.062914	.062889	.062864	.062839
20	.0099269	.009901	.009876	.009851	.009826	.009801	.009776	.009751
21	.0008389	.000813	.000788	.000763	.000738	.000713	.000688	.000663
22	.0000709	.000045	.000020	.000000	.000000	.000000	.000000	.000000
23	.0000009	.000000	.000000	.000000	.000000	.000000	.000000	.000000
24	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
25	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
26	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
27	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
28	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
29	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
30	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
31	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
32	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
33	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
34	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
35	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
36	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
37	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
38	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
39	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
40	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
41	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
42	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
43	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
44	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
45	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
46	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
47	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
48	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
49	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
50	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
51	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
52	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
53	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
54	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
55	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
56	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
57	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
58	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
59	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
60	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
61	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
62	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
63	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
64	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
65	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
66	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
67	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
68	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
69	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
70	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
71	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
72	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
73	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
74	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
75	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
76	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
77	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
78	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
79	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
80	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
81	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
82	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
83	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
84	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
85	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
86	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
87	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
88	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
89	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
90	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
91	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
92	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
93	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
94	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
95	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
96	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
97	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
98	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
99	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
100	.0000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 115

x	.17	.18	.19	.20	.21	.22	.23	.24
20	.4939736	.6082763	.7057992	.7904843	.8573732	.9071233	.9420964	.9654064
21	.3968546	.5089639	.6172745	.7146153	.7964370	.8610599	.9092043	.9431511
22	.3068659	.4133886	.5233374	.6288111	.7231593	.8022854	.8647365	.9113580
23	.2281135	.3361944	.4489193	.5571866	.6539314	.7314445	.8000332	.8604600
24	.1628921	.2739994	.3898927	.5045058	.6150473	.7156748	.8082111	.8836941
25	.1116841	.2270021	.3593993	.5037155	.6593179	.8233349	.9010733	.9747376
26	.0735064	.1934495	.3210486	.4749163	.6511138	.8436664	.9537791	.9811374
27	.0464388	.1687989	.3033769	.4649939	.6599561	.8861803	.9875878	.9978411
28	.02881643	.1533601	.2923358	.4673787	.6768415	.9047266	.9875339	.9971446
29	.0164006	.1330546	.2860654	.4809988	.7142994	.9385783	.9898364	.9980390
30	.0091784	.1196827	.2888766	.5081438	.7590500	.9715843	.9961883	.9993454
31	.0049283	.1124612	.323681	.5438688	.7739458	.9821616	.9963388	.9996788
32	.0025448	.1069036	.3613652	.5771878	.76496305	.9839962	.9984096	.9997300
33	.0013633	.1033853	.4076591	.6161809	.732681	.9857317	.9992412	.9997738
34	.0006032	.1016741	.451510	.6592976	.689913	.9866708	.9996063	.9998696
35	.0002771	.1008211	.5081664	.714773	.6611206	.9880314	.9998337	.99996383
36	.0001225	.1003877	.5710890	.77461	.642786	.9891283	.9999253	.9999943
37	.0000581	.1001763	.6405275	.84121	.624184	.9903480	.9999598	.9999974
38	.0000284	.1000073	.7142463	.907001	.607950	.9914874	.9999777	.9999993
39	.0000084	.1000032	.7901108	.963347	.599992	.9928419	.9999939	.9999999
40	.0000032	.1000013	.8680481	.9901543	.6004444	.9941584	.9999953	.9999999
41	.0000012	.1000003	.9438201	.999068	.6008026	.9955778	.9999979	.9999999
42	.0000004	.1000000	.999991	.999991	.600954	.9969782	.9999994	.9999999
43	.0000001	.1000000	.999999	.999999	.601294	.9984321	.9999999	.9999999
44		.1000000	.999999	.999999	.60178	.9998581	.9999999	.9999999
45		.1000000	.999999	.999999	.60228	.9999787	.9999999	.9999999
46			.999999	.999999	.60289	.9999999	.9999999	.9999999
47			.999999	.999999	.60351	.9999999	.9999999	.9999999
48			.999999	.999999	.60417	.9999999	.9999999	.9999999
49			.999999	.999999	.60487	.9999999	.9999999	.9999999
50			.999999	.999999	.60560	.9999999	.9999999	.9999999
51				.999999	.60636	.9999999	.9999999	.9999999
52					.60715	.9999999	.9999999	.9999999
53					.60797	.9999999	.9999999	.9999999
54					.60882	.9999999	.9999999	.9999999

x	.25	.26	.27	.28	.29	.30	.31	.32
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	.9999998	.9999997	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
11	.9999998	.9999997	.9999998	.9999997	.9999999	1.0000000	1.0000000	1.0000000
12	.9999997	.9999996	.9999997	.9999996	.9999998	.9999999	1.0000000	1.0000000
13	.9999996	.9999995	.9999996	.9999995	.9999997	.9999998	.9999999	1.0000000
14	.9999995	.9999994	.9999995	.9999994	.9999996	.9999997	.9999998	.9999999
15	.9999994	.9999993	.9999994	.9999993	.9999995	.9999996	.9999997	.9999998
16	.9999993	.9999992	.9999993	.9999992	.9999994	.9999995	.9999996	.9999997
17	.9999992	.9999991	.9999992	.9999991	.9999993	.9999994	.9999995	.9999996
18	.9999991	.9999990	.9999991	.9999990	.9999992	.9999993	.9999994	.9999995
19	.9999990	.9999989	.9999990	.9999989	.9999991	.9999992	.9999993	.9999994
20	.9999989	.9999988	.9999989	.9999988	.9999989	.9999990	.9999991	.9999992
21	.9999988	.9999987	.9999988	.9999987	.9999988	.9999989	.9999990	.9999991
22	.9999987	.9999986	.9999987	.9999986	.9999987	.9999988	.9999989	.9999990
23	.9999986	.9999985	.9999986	.9999985	.9999986	.9999987	.9999988	.9999989
24	.9999985	.9999984	.9999985	.9999984	.9999985	.9999986	.9999987	.9999988
25	.9999984	.9999983	.9999984	.9999983	.9999984	.9999985	.9999986	.9999987
26	.9999983	.9999982	.9999983	.9999982	.9999983	.9999984	.9999985	.9999986
27	.9999982	.9999981	.9999982	.9999981	.9999982	.9999983	.9999984	.9999985
28	.9999981	.9999980	.9999981	.9999980	.9999981	.9999982	.9999983	.9999984
29	.9999980	.9999979	.9999980	.9999979	.9999980	.9999981	.9999982	.9999983
30	.9999979	.9999978	.9999979	.9999978	.9999979	.9999980	.9999981	.9999982
31	.9999978	.9999977	.9999978	.9999977	.9999978	.9999979	.9999980	.9999981
32	.9999977	.9999976	.9999977	.9999976	.9999977	.9999978	.9999979	.9999980
33	.9999976	.9999975	.9999976	.9999975	.9999976	.9999977	.9999978	.9999979
34	.9999975	.9999974	.9999975	.9999974	.9999975	.9999976	.9999977	.9999978
35	.9999974	.9999973	.9999974	.9999973	.9999974	.9999975	.9999976	.9999977
36	.9999973	.9999972	.9999973	.9999972	.9999973	.9999974	.9999975	.9999976
37	.9999972	.9999971	.9999972	.9999971	.9999972	.9999973	.9999974	.9999975
38	.9999971	.9999970	.9999971	.9999970	.9999971	.9999972	.9999973	.9999974
39	.9999970	.9999969	.9999970	.9999969	.9999970	.9999971	.9999972	.9999973
40	.9999969	.9999968	.9999969	.9999968	.9999969	.9999970	.9999971	.9999972
41	.9999968	.9999967	.9999968	.9999967	.9999968	.9999969	.9999970	.9999971
42	.9999967	.9999966	.9999967	.9999966	.9999967	.9999968	.9999969	.9999970
43	.9999966	.9999965	.9999966	.9999965	.9999966	.9999967	.9999968	.9999969
44	.9999965	.9999964	.9999965	.9999964	.9999965	.9999966	.9999967	.9999968
45	.9999964	.9999963	.9999964	.9999963	.9999964	.9999965	.9999966	.9999967
46	.9999963	.9999962	.9999963	.9999962	.9999963	.9999964	.9999965	.9999966
47	.9999962	.9999961	.9999962	.9999961	.9999962	.9999963	.9999964	.9999965
48	.9999961	.9999960	.9999961	.9999960	.9999961	.9999962	.9999963	.9999964
49	.9999960	.9999959	.9999960	.9999959	.9999960	.9999961	.9999962	.9999963
50	.9999959	.9999958	.9999959	.9999958	.9999959	.9999960	.9999961	.9999962
51	.9999958	.9999957	.9999958	.9999957	.9999958	.9999959	.9999960	.9999961
52	.9999957	.9999956	.9999957	.9999956	.9999957	.9999958	.9999959	.9999960
53	.9999956	.9999955	.9999956	.9999955	.9999956	.9999957	.9999958	.9999959
54	.9999955	.9999954	.9999955	.9999954	.9999955	.9999956	.9999957	.9999958
55	.9999954	.9999953	.9999954	.9999953	.9999954	.9999955	.9999956	.9999957

$$P(x, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

	.49	.50
18	1.00000000	1.00000000
19	1.00000000	1.00000000
20	1.00000000	1.00000000
21	1.00000000	1.00000000
22	1.00000000	1.00000000
23	1.00000000	1.00000000
24	1.00000000	1.00000000
25	1.00000000	1.00000000
26	1.00000000	1.00000000
27	1.00000000	1.00000000
28	1.00000000	1.00000000
29	.99999999	1.00000000
30	.99999998	1.00000000
31	.99999996	.99999999
32	.99999992	.99999998
33	.99999986	.99999995
34	.99999978	.99999990
35	.99999968	.99999981
36	.99999956	.99999970
37	.99999942	.99999957
38	.99999926	.99999942
39	.99999908	.99999925
40	.99999888	.99999906
41	.99999866	.99999885
42	.99999841	.99999862
43	.99999813	.99999837
44	.99999782	.99999810
45	.99999748	.99999781
46	.99999711	.99999749
47	.99999671	.99999714
48	.99999628	.99999677
49	.99999582	.99999637
50	.99999533	.99999594
51	.99999481	.99999548
52	.99999426	.99999500
53	.99999368	.99999450
54	.99999307	.99999398
55	.99999243	.99999344
56	.99999176	.99999287
57	.99999107	.99999228
58	.99999035	.99999167
59	.99998960	.99999104
60	.99998883	.99999039
61	.99998803	.99998972
62	.99998721	.99998903
63	.99998637	.99998832
64	.99998551	.99998760
65	.99998462	.99998687
66	.99998371	.99998612
67	.99998278	.99998536
68	.99998183	.99998458
69	.99998086	.99998379
70	.99997987	.99998298
71	.99997886	.99998215
72	.99997783	.99998130
73	.99997678	.99998044
74	.99997571	.99997957
75	.99997462	.99997868
76	.99997351	.99997778
77	.99997238	.99997686
78	.99997123	.99997593
79	.99997006	.99997498
80	.99996887	.99997402
81	.99996766	.99997305
82	.99996643	.99997207
83	.99996518	.99997108
84	.99996391	.99997008
85	.99996262	.99996907

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$$P(n, r, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 116

X	.01	.02	.03	.04	.05	.06	.07	.08
1	.4603386	.4640103	.4707907	.4791206	.4873948	.4958365	.5044798	.5132570
2	.3871603	.3874785	.3859966	.3847870	.3831438	.3814330	.3797818	.3782014
3	.1110616	.1101089	.1096414	.1087122	.1073394	.1055337	.1033378	.1008137
4	.0896499	.0893111	.0888837	.0883555	.0877483	.0870886	.0863913	.0856634
5	.0064169	.0064028	.0063963	.0063931	.0063925	.0063934	.0063943	.0063950
6	.0011488	.0011488	.0011488	.0011488	.0011488	.0011488	.0011488	.0011488
7	.0001603	.0001603	.0001603	.0001603	.0001603	.0001603	.0001603	.0001603
8	.0000844	.0000844	.0000844	.0000844	.0000844	.0000844	.0000844	.0000844
9	.0000089	.0000089	.0000089	.0000089	.0000089	.0000089	.0000089	.0000089
10	.0000003	.0000003	.0000003	.0000003	.0000003	.0000003	.0000003	.0000003
11		.00000214	.00007715	.00497320	.0111082	.0291346	.0690948	.1338748
12		.00000041	.00008229	.00243700	.0135247	.0418170	.1188483	.2617809
13		.00000007	.00004809	.0007846	.0054270	.0281044	.0948863	.2344880
14		.00000001	.0000109	.0002334	.0008175	.0098411	.0383369	.1080780
15			.0000002	.0000644	.0006773	.0048211	.0186414	.0440869
16			.0000004	.0000186	.0002248	.0015810	.0070702	.0287115
17			.0000001	.0000040	.0000678	.0005737	.0039983	.0119118
18				.0000002	.0000198	.0001954	.0011983	.0068843
19				.0000002	.0000081	.0000647	.0004489	.0028149
20					.0000013	.0000189	.0001391	.0008003
21					.0000003	.0000084	.0000333	.0002389
22					.0000001	.0000018	.0000149	.0001134
23						.0000004	.0000081	.0000488
24							.0000018	.0000141
25							.0000004	.0000044
26							.0000001	.0000013
27								.0000004
28								.0000001
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$$P(n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 116

x	.17	.18	.19	.20	.21	.22	.23	.24
30	.5107694	.4217296	.7207378	.8031292	.8674023	.9146067	.9473728	.9669301
31	.4133658	.5263002	.6340942	.7297891	.8092336	.8711938	.9167695	.9464924
32	.3221640	.4305368	.5411854	.6459719	.7385476	.8152158	.8749809	.9189883
33	.2415014	.3397660	.4470775	.5534875	.6574092	.7470373	.8210800	.8787555
34	.1739797	.2583310	.3569591	.4630359	.5692600	.6684459	.7552769	.8266303
35	.1203095	.1890616	.2748551	.3734733	.4784607	.5825495	.6791163	.7632903
36	.0799956	.1331054	.2040684	.2910761	.3896382	.4933935	.5953960	.6894501
37	.0510403	.0901147	.1459533	.2189784	.3069997	.4053805	.5078718	.6078373
38	.0312709	.0586580	.1008136	.1589969	.2337756	.3226332	.4207257	.5219290
39	.0184004	.0367098	.0666342	.1111536	.1719089	.2484486	.3379855	.4356978
40	.0104012	.0220897	.0425191	.0749346	.1219997	.1849555	.2629894	.3530660
41	.0056498	.0127828	.0261148	.0486757	.0835277	.1330214	.1980252	.2773928
42	.0029500	.0071152	.0154400	.0304640	.0531567	.0823048	.1241923	.1810984
43	.0014812	.0038106	.0087888	.0183702	.0351242	.0619399	.1014799	.1544896
44	.0007154	.0019441	.0048175	.0104742	.0210288	.0400820	.0690044	.1078971
45	.0003325	.0009746	.0025435	.0055774	.0127734	.0250321	.0433230	.0736306
46	.0001488	.0004637	.0012937	.0032264	.0072954	.0150670	.0287518	.0508361
47	.0000641	.0002144	.0006342	.0016789	.0040190	.0087757	.0176141	.0327216
48	.0000266	.0000951	.0002996	.0008425	.0021359	.0049268	.0104210	.0203538
49	.0000106	.0000407	.0001265	.0003478	.0009092	.0020699	.0045954	.0097441
50	.0000041	.0000168	.0000600	.0001904	.0005420	.0013968	.0032856	.0071048
51	.0000015	.0000067	.0000254	.0000858	.0002589	.0007055	.0017512	.0039873
52	.0000005	.0000026	.0000104	.0000373	.0001194	.0003442	.0009016	.0021624
53	.0000002	.0000009	.0000041	.0000157	.0000531	.0001621	.0004485	.0011333
54	.0000001	.0000001	.0000006	.0000025	.0000095	.0000324	.0001001	.0002811
55			.0000002	.0000009	.0000038	.0000138	.0000449	.0001330
56			.0000001	.0000003	.0000015	.0000057	.0000195	.0000609
57				.0000001	.0000006	.0000022	.0000082	.0000269
58					.0000002	.0000009	.0000033	.0000115
59					.0000001	.0000003	.0000013	.0000048
60						.0000001	.0000005	.0000019
61							.0000002	.0000007
62							.0000001	.0000003
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$$P(n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 116

	.25	.26	.27	.28	.29	.30	.31	.32
56	.00000001	.00000002	.00000003	.00000004	.00000005	.00000007	.00000009	.00000011
57	.00000001	.00000001	.00000001	.00000001	.00000001	.00000001	.00000001	.00000001
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59								
60								
61					.00000001	.00000001	.00000001	.00000001
62						.00000001	.00000001	.00000001
63							.00000001	.00000001
64								.00000001
65								.00000001

	.33	.34	.35	.36	.37	.38	.39	.40
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
14	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
15	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000

16	.99999994	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
17	.99999980	.99999993	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
18	.99999919	.99999978	.99999992	.99999997	.99999999	1.00000000	1.00000000	1.00000000
19	.99999810	.99999935	.99999976	.99999991	.99999997	.99999999	1.00000000	1.00000000
20	.99999553	.99999821	.99999931	.99999974	.99999991	.99999997	.99999999	1.00000000
21	.99998890	.99999537	.99999814	.99999928	.99999973	.99999990	.99999997	.99999999
22	.99997397	.99998867	.99999525	.99999808	.99999925	.99999972	.99999990	.99999997
23	.99994221	.99997377	.99998854	.99999518	.99999805	.99999924	.99999971	.99999990
24	.99987829	.99994241	.99997377	.99998850	.99999515	.99999803	.99999971	.99999990
25	.99975630	.99987979	.99994295	.99997395	.99998853	.99999516	.99999803	.99999923

26	.99953518	.99976110	.99988189	.99994383	.99997430	.99998860	.99999521	.99999805
27	.99915399	.99947480	.99976681	.99988452	.99994499	.99997480	.99998889	.99999529
28	.99858816	.99917957	.99956024	.99977332	.99988762	.99994642	.99997543	.99998917
29	.99754838	.99837780	.99920671	.99974450	.99987603	.99991114	.99994808	.99997610
30	.99608402	.99737111	.9982905	.99923513	.99956967	.99978833	.99989908	.99994994
31	.99392337	.99623177	.99772701	.99868154	.99926460	.99960559	.99979663	.99989919
32	.9913436	.99423335	.99577254	.99678167	.99773497	.99829488	.99868212	.99898533
33	.98739523	.99147509	.99455227	.99552693	.99650873	.99708903	.99732576	.99739912
34	.98270735	.98787131	.99181071	.99477882	.99677558	.99799985	.99848347	.99856706
35	.97707079	.98339228	.98833842	.99214106	.99490267	.99681908	.99780972	.99839802

36	.97056651	.97786946	.98355800	.98879667	.99246600	.99512355	.99696318	.99818104
37	.96338840	.97158943	.97855095	.98456391	.98924611	.99278536	.99534120	.99710558
38	.95588217	.96446766	.97247227	.97941597	.98515736	.98986880	.99309901	.99535537
39	.9482202	.95690469	.96558565	.97339593	.98016512	.98573864	.99011879	.99340883
40	.94067618	.94911253	.95810698	.96662338	.97430123	.98098955	.98630801	.99054210
41	.93273793	.94138532	.95038614	.95928998	.96767177	.97518891	.98161795	.98686573
42	.92603540	.93400648	.94267979	.95164357	.96045456	.96870165	.97605968	.98238851
43	.92014031	.92721859	.9356984	.94396302	.95288550	.96160184	.96971377	.97691377
44	.91514351	.92180885	.92840337	.93652807	.94523541	.95411260	.96273163	.97070881
45	.91106030	.91605760	.92269197	.92958949	.93778126	.94649738	.95533546	.96384852

46	.90784249	.91181830	.91784432	.92344476	.92977673	.93692955	.94474932	.95324688
47	.90539624	.90844754	.91359206	.91923305	.92442721	.93029496	.93673308	.94373064
48	.90360175	.90586133	.90966962	.91388093	.91873366	.92421616	.93035409	.93718203
49	.90233128	.90434616	.90843112	.91290820	.91818416	.92421616	.93035409	.93718203
50	.90146278	.90327700	.90730374	.91184122	.91716276	.92321603	.93006224	.93771248
51	.90089961	.90163186	.90535569	.90968023	.91473528	.92052864	.92706790	.93437827
52	.90052427	.90100177	.90411131	.90800716	.91270938	.91822864	.92456790	.93163718
53	.90029934	.90059603	.90312182	.90640109	.91003128	.91472293	.92028950	.92671794
54	.90016557	.90034363	.90237351	.90524980	.90850118	.91292790	.91833963	.92463712
55	.90008869	.90019194	.9019187	.90439677	.90755474	.91191152	.91728668	.92358286
56	.90004601	.90010385	.90180092	.90444414	.90745889	.91152965	.91653903	.92241807
57	.90002311	.90005442	.9012065	.90325259	.90590052	.90940889	.91368151	.91862665
58	.90001124	.90002761	.9006382	.9019171	.90428700	.90736105	.91104181	.91534130
59	.90000529	.90001354	.9003269	.9007427	.9015943	.9032422	.90623578	.91048666
60	.90000241	.90000645	.9001621	.9003838	.9006580	.9011814	.90236429	.90409473

61	.90000106	.90000397	.90000776	.90001320	.90002471	.90003843	.90005347	.90007024
62	.90000045	.90000132	.90000363	.90000630	.90001102	.90001711	.90002526	.90003579
63	.90000019	.90000057	.90000162	.90000346	.90000621	.90001094	.90001799	.90002773
64	.90000007	.90000024	.90000071	.90000148	.90000321	.90000616	.90001094	.90001799
65	.90000003	.90000010	.90000030	.90000067	.90000136	.90000283	.90000544	.90000944
66	.90000001	.90000004	.90000012	.90000037	.90000075	.90000145	.90000283	.90000544
67		.90000001	.90000003	.90000015	.90000045	.90000096	.90000186	.90000355
68		.90000001	.90000002	.90000008	.90000019	.90000054	.90000110	.90000210
69			.90000001	.90000002	.90000007	.90000016	.90000033	.90000063
70				.90000001	.90000003	.90000009	.90000017	.90000033
71					.90000001	.90000004	.90000011	.90000023
72						.90000001	.90000004	.90000011
73							.90000001	.90000004
74								.90000001
75								.90000001

	.41	.42	.43	.44	.45	.46	.47	.48
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000

$$P(c, n, r) = \sum_{i=0}^n \binom{n}{i} p^i (1-p)^{n-i}$$

n = 116

	.41	.42	.43	.44	.45	.46	.47	.48
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
14	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
15	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
16	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
17	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
18	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
19	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
20	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
21	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
22	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
23	.99999996	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
24	.99999990	.99999996	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
25	.99999974	.99999989	.99999996	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
26	.99999924	.99999971	.99999990	.99999996	.99999999	1.00000000	1.00000000	1.00000000
27	.99999808	.99999935	.99999972	.99999990	.99999996	.99999999	1.00000000	1.00000000
28	.99999541	.99999813	.99999927	.99999972	.99999990	.99999997	.99999999	1.00000000
29	.99999251	.99999555	.99999819	.99999929	.99999973	.99999990	.99999997	.99999999
30	.99997706	.99999090	.99999573	.99999829	.99999932	.99999975	.99999991	.99999997
31	.99995197	.99997801	.99999033	.99999592	.99999834	.99999936	.99999976	.99999991
32	.99990361	.99995414	.99997904	.99999080	.99999613	.99999843	.99999939	.99999977
33	.99981434	.99990822	.99995642	.99998013	.99999130	.99999635	.99999853	.99999943
34	.99965644	.99982359	.99991298	.99995878	.99998126	.99999182	.99999658	.99999862
35	.99938857	.99967397	.99983298	.99991783	.99996120	.99998242	.99999236	.99999862
36	.99895246	.99620114	.99691600	.99842466	.9992274	.9996364	.9998359	.9999290
37	.99870757	.99006537	.99451511	.99709221	.9985195	.9992766	.9996610	.9998477
38	.9724601	.99035904	.9906017	.9948283	.9972671	.9986138	.9993255	.9998653
39	.9576585	.9730423	.9846422	.9911106	.9951368	.9977400	.9987071	.9993738
40	.9310867	.9597242	.9752000	.9853199	.9916509	.9954403	.9976102	.9993987
41	.9095676	.9400442	.9617490	.9765312	.9861607	.9921611	.9957377	.9977767
42	.8741192	.9136275	.9429395	.9637309	.9778140	.9869831	.9926598	.9960281
43	.8301106	.8794681	.9176008	.9457714	.9656684	.9791066	.9877857	.9931457
44	.7775047	.8368989	.8847050	.9214872	.9485388	.9675597	.9803473	.9885670
45	.7169738	.7887558	.8435328	.8898311	.9252865	.9512406	.9694035	.9815347
46	.6494382	.7265004	.7838372	.8500347	.8948470	.9285582	.9538756	.9711982
47	.5771078	.6602711	.7359728	.8017724	.8564057	.8997535	.9326218	.9564427
48	.5022478	.5889426	.6709589	.7452253	.8095646	.8626504	.9045508	.9361569
49	.4274659	.5144893	.6004567	.6815663	.7544718	.8172162	.8687670	.9092392
50	.3553489	.4397496	.5266463	.6119522	.6919175	.7635056	.8247295	.8747575
51	.2881945	.3672656	.4520337	.5387217	.6233352	.7021960	.7723997	.8321063
52	.2278024	.2993211	.3791921	.4642603	.5507187	.6346086	.7183453	.7811544
53	.1753332	.2378194	.3105038	.3911287	.4764518	.5626404	.6457756	.7223681
54	.1313224	.1840404	.2479317	.3217423	.4030766	.4886103	.5744898	.6568392
55	.0956335	.1386064	.1928610	.2581381	.3330366	.4150371	.5007382	.5862697
56	.0676758	.1015187	.1460289	.2018030	.2684378	.3443871	.4270119	.5128376
57	.0465132	.0782641	.1075456	.1535876	.2108651	.2788102	.3557944	.4390025
58	.0310329	.0599647	.0769653	.1137102	.1612110	.2200462	.2893154	.3672597
59	.0200899	.0335385	.0535340	.0818378	.1200127	.1691076	.2293458	.2998938
60	.0126144	.0218614	.0361425	.0572136	.0868200	.1264510	.1770667	.2307638
61	.0076792	.0138012	.0236787	.0388439	.0610203	.0919307	.1330239	.1851575
62	.0045308	.0084536	.0150468	.0255893	.0416416	.0649318	.0977188	.1397308
63	.0025900	.0050184	.0092702	.0163506	.0275765	.0445347	.0696621	.1025327
64	.0014339	.0028862	.0055350	.0101089	.0177126	.0296394	.0475522	.0731019
65	.0007687	.0016076	.0032015	.0060805	.0110293	.0191317	.0317773	.0506031
66	.0003988	.0008669	.0017932	.0035358	.0066547	.0119709	.0206073	.0359892
67	.0002002	.0004424	.0009723	.0019708	.0038090	.0072573	.0129531	.0221386
68	.0000979	.0002284	.0005101	.0010489	.0020003	.0042608	.0078876	.0139753
69	.0000457	.0001115	.0002582	.0005720	.0011047	.0024214	.0046508	.0085453
70	.0000207	.0000536	.0001270	.0002917	.0006380	.0013314	.0026539	.0050585
71	.0000091	.0000240	.0000602	.0001438	.0003367	.0007080	.0014650	.0028975
72	.0000038	.0000104	.0000276	.0000685	.0001617	.0003639	.0007819	.0016051
73	.0000016	.0000042	.0000118	.0000315	.0000773	.0001808	.0004033	.0008594
74	.0000006	.0000018	.0000052	.0000140	.0000357	.0000867	.0002009	.0004446
75	.0000002	.0000007	.0000022	.0000060	.0000159	.0000401	.0000966	.0002221
76	.0000001	.0000003	.0000009	.0000025	.0000068	.0000179	.0000448	.0001071
77	.0000001	.0000001	.0000003	.0000010	.0000028	.0000077	.0000201	.0000498
78			.0000001	.0000004	.0000011	.0000032	.0000087	.0000223
79				.0000002	.0000004	.0000013	.0000036	.0000096
80				.0000001	.0000002	.0000005	.0000014	.0000040
81					.0000001	.0000002	.0000006	.0000016
82						.0000001	.0000002	.0000006
83							.0000001	.0000002
84								.0000001

	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

λ	.49	.50
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	1.00000000	1.00000000
19	1.00000000	1.00000000
20	1.00000000	1.00000000
21	1.00000000	1.00000000
22	1.00000000	1.00000000
23	1.00000000	1.00000000
24	1.00000000	1.00000000
25	1.00000000	1.00000000
26	1.00000000	1.00000000
27	1.00000000	1.00000000
28	1.00000000	1.00000000
29	1.00000000	1.00000000
30	.99999999	1.00000000
31	.99999997	.99999999
32	.99999992	.99999997
33	.99999979	.99999993
34	.99999947	.99999981
35	.99999873	.99999952
36	.99999706	.99999883
37	.99999445	.99999730
38	.99998594	.99999390
39	.99997094	.99998109
40	.99994712	.99997330
41	.99988803	.99994675
42	.99979391	.99989753
43	.99963105	.99980965
44	.99936178	.99965042
45	.99893256	.99940751
46	.9837274	.99006604
47	.9729425	.9818640
48	.9589108	.9746352
49	.9396026	.9613689
50	.9138104	.9429584
51	.88066225	.9182884
52	.8393476	.8863625
53	.7897777	.8464552
54	.7322668	.7962652
55	.6673021	.7420416
56	.5979824	.6786663
57	.5249124	.6096304
58	.4510109	.5369611
59	.3787842	.4630369
60	.3105662	.3903696
61	.2483065	.3213337
62	.1933803	.2579565
63	.1465711	.2017348
64	.1080225	.1535448
65	.0773523	.1136375
66	.0537766	.0817116
67	.0362741	.0570416
68	.0237248	.0386111
69	.0150365	.0253648
70	.0092295	.0161360
71	.0054835	.0099396
72	.0031516	.0059249
73	.0017514	.0034158
74	.0009405	.0019035
75	.0004877	.0010347
76	.0002442	.0005325
77	.0001179	.0002670
78	.0000549	.0001291
79	.0000246	.0000602
80	.0000106	.0000270
81	.0000044	.0000117
82	.0000016	.0000040
83	.0000007	.0000019
84	.0000003	.0000007
85	.0000001	.0000003
86		.0000001

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 117

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.6914555	.9059101	.9716670	.9915716	.9975245	.9992823	.9997946	.9999420
2	.3268181	.6813141	.8691423	.9504844	.9822807	.9939222	.9979862	.9993523
3	.1131926	.4154421	.6352321	.8511898	.9357465	.9740787	.9900913	.9963779
4	.0301141	.0874470	.1671945	.2825942	.4418629	.6255253	.7973119	.9384634
5	.0066512	.0264703	.0750063	.1642620	.3010370	.4871995	.7184466	.9218926
6	.0011511	.0067229	.0206728	.05269159	.10335262	.1797647	.2751231	.3936055
7	.0001901	.0014167	.00631194	.02089800	.053689582	.10579715	.1785330	.2752866
8	.0000259	.0002570	.00250852	.00978437	.03161102	.0843124	.15791383	.2571513
9	.0000031	.0000676	.00089108	.00456303	.01328137	.0344521	.0748724	.1279309
10	.0000003	.0001305	.0008524	.0192816	.05688537	.1251984	.2533611	.418437
11		.0000254	.0000287	.0074250	.0328417	.0933299	.1964552	.3340400
12		.0000045	.00002199	.0026194	.0144039	.0467074	.1181829	.2259373
13		.0000007	.00000536	.00008507	.0028319	.0235480	.0661416	.1229019
14		.0000001	.00000121	.0000254	.0001888	.0010577	.0348037	.0845827
15			.0000005	.0000015	.00002484	.0017310	.0169136	.0469107
16			.0000001	.00000045	.00000756	.00006341	.0038834	.0119472
17				.0000001	.000000216	.00002181	.0013215	.0055051
18				.00000002	.00000015	.00000706	.0000511	.00279309
19					.00000015	.00000216	.0001794	.0009830
20						.0000004	.00000607	.0003822
21					.00000001	.00000017	.0000195	.0001408
22						.0000004	.0000059	.0000493
23						.0000001	.0000017	.0000174
24							.0000005	.0000052
25								.0000016
26							.0000001	.0000005
27								.0000001
28								.0000001
29								.0000001
30								.0000001
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87								.0000001
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114								.0000001
115								.0000001
116								.0000001
117								.0000001

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 117

x	.17	.18	.19	.20	.21	.22	.23	.24
20	.5274306	.6278641	.7352082	.8152265	.8768772	.9212706	.9522315	.9721327
21	.4299239	.5434175	.6505565	.7444571	.8214490	.8807451	.9238083	.9533974
22	.3376692	.4477553	.5588181	.6627354	.7533917	.8275309	.8845223	.9260693
23	.2542140	.3561050	.4649580	.5735844	.6744483	.7630366	.8334773	.8884114
24	.1854584	.2789893	.3740006	.4615262	.5477713	.6287380	.7014132	.7652924
25	.1294998	.2015301	.2904358	.3813860	.4752285	.5614467	.6396337	.7105199
26	.8868634	.1431775	.2175178	.3075556	.4082909	.5130078	.6146523	.7071718
27	.0559689	.0978530	.1569952	.2333979	.3243538	.4247433	.5280025	.6274844
28	.0346317	.0643802	.1091472	.1709132	.2491527	.3408376	.4407693	.5485470
29	.0205884	.0406603	.0730713	.1207023	.1848985	.2647692	.3570157	.4548393
30	.0117610	.0247213	.0471010	.0821704	.1224800	.1799240	.2480238	.3289977
31	.0064573	.0144581	.0292316	.0539275	.0916068	.1444469	.2129670	.2955544
32	.0034090	.0081354	.0174682	.0341063	.0611146	.1013248	.1545739	.2270090
33	.0017399	.0040544	.0090525	.0180986	.0342310	.0657735	.1121308	.1688357
34	.0008455	.0020945	.0055721	.0122134	.0244159	.0448908	.0842915	.1254820
35	.0003976	.0011527	.0029755	.0069168	.0146206	.0283431	.0507704	.0846008
36	.0001800	.0005573	.0015312	.0037766	.0084458	.0172749	.0325634	.0569548
37	.0000785	.0002596	.0007595	.0019804	.0047071	.0101641	.0201758	.0370690
38	.0000330	.0001166	.0003632	.0009098	.0022534	.0057735	.0112075	.0203216
39	.0000134	.0000505	.0001675	.0004947	.0013130	.0031664	.0062985	.0114820
40	.0000053	.0000211	.0000745	.0002339	.0006560	.0016769	.0038994	.0083356
41	.0000020	.0000085	.0000320	.0001067	.0003183	.0008576	.0021041	.0047355
42	.0000007	.0000033	.0000133	.0000470	.0001487	.0004337	.0010970	.0026004
43	.0000003	.0000015	.0000062	.0000200	.0000670	.0002022	.0005827	.0013903
44	.0000001	.0000004	.0000020	.0000082	.0000292	.0000932	.0002691	.0007083
45		.0000002	.0000008	.0000033	.0000123	.0000415	.0001266	.0003514
46		.0000001	.0000003	.0000012	.0000050	.0000179	.0000576	.0001685
47			.0000001	.0000005	.0000020	.0000074	.0000253	.0000788
48				.0000002	.0000010	.0000030	.0000108	.0000351
49				.0000001	.0000003	.0000012	.0000044	.0000152
50					.0000001	.0000004	.0000018	.0000064
51						.0000002	.0000007	.0000026
52						.0000001	.0000003	.0000010
53							.0000001	.0000004
54								.0000001
55								.0000001

x	.25	.26	.27	.28	.29	.30	.31	.32
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	.9999997	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	.9999995	.9999998	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000
12	.9999993	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000
13	.9999994	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000
14	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
15	.9999996	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
16	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
17	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
18	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
19	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
20	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
21	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
22	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
23	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
24	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
25	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
26	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
27	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
28	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
29	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
30	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
31	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
32	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
33	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
34	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
35	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
36	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
37	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
38	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
39	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
40	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
41	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
42	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
43	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
44	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
45	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
46	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
47	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
48	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
49	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
50	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
51	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
52	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
53	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
54	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
55	.9999995	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999

$$P(n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 117

p	.25	.26	.27	.28	.29	.30	.31	.32
56	.00000001	.00000003	.00000012	.00000040	.0000127	.0000370	.0001003	.0002537
57		.00000001	.00000005	.00000016	.0000054	.0000166	.0000469	.0001240
58			.00000002	.00000006	.0000022	.0000072	.0000212	.0000587
59			.00000001	.00000002	.0000009	.0000030	.0000093	.0000269
60				.00000001	.00000003	.0000012	.0000039	.0000119
61					.00000001	.00000005	.0000016	.0000051
62						.00000002	.0000006	.0000021
63						.00000001	.0000002	.0000009
64							.00000001	.0000003
65								.00000001

p	.33	.34	.35	.36	.37	.38	.39	.40
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
14	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
15	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000

16	.99999995	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
17	.99999984	.99999995	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
18	.99999953	.99999983	.99999994	.99999998	.99999999	1.00000000	1.00000000	1.00000000
19	.99999816	.99999849	.99999882	.99999924	.99999959	.99999999	1.00000000	1.00000000
20	.99998644	.9999860	.9999947	.9999981	.9999993	.9999998	.9999999	1.00000000
21	.99999108	.99999533	.99999855	.99999945	.99999980	.99999991	.99999998	.99999999
22	.99997889	.99999095	.99999626	.99999851	.99999943	.99999979	.99999993	.99999997
23	.99995269	.99997884	.99999089	.99999622	.99999849	.99999942	.99999979	.99999992
24	.99989939	.99995307	.99997094	.99999091	.99999622	.99999849	.99999942	.99999978
25	.99978656	.99990108	.99995374	.9999919	.9999909	.99999625	.99999850	.99999942

26	.99608815	.9980145	.9990326	.9995467	.9997957	.9999115	.9999631	.9999832
27	.9927978	.9961984	.9980708	.9990587	.9995583	.9998007	.9999136	.9999639
28	.9873460	.9930452	.9963254	.9981335	.9990885	.9995720	.9998068	.9999168
29	.9787171	.9878241	.9933045	.9964607	.9982015	.9991215	.9995875	.9999158
30	.9656726	.9756694	.9863123	.9935730	.9966029	.9982740	.9991571	.9996044
31	.9468262	.9670958	.9804272	.9888083	.9938487	.9967503	.9983500	.9991949
32	.9207751	.9490621	.9685115	.9812866	.9893093	.9941295	.9969018	.9984287
33	.8862914	.9240950	.9512682	.9699159	.9821444	.9898125	.9944134	.9970560
34	.8425435	.8890659	.9273526	.9534414	.9713057	.9829974	.9903156	.9946988
35	.7893086	.8488017	.9055372	.9305465	.9555790	.9726777	.9838429	.9906163

36	.7271292	.7972920	.8549115	.9000065	.9336757	.9576785	.9740292	.9846783
37	.6573708	.7368504	.8050842	.8608771	.9043747	.9367387	.9597377	.9753757
38	.5821533	.6686866	.7463481	.8126923	.8667020	.9086425	.9397347	.9617545
39	.5041587	.5947610	.6727647	.7356314	.7820123	.8223894	.858108	.8906624
40	.4263431	.5176187	.6071401	.6906150	.7647087	.8273803	.8779428	.9168799
41	.3516054	.4401257	.5308843	.6193000	.7012467	.7735872	.8344707	.8833627
42	.2824723	.3651528	.4537701	.5439627	.6312493	.7116681	.7822737	.8411980
43	.2208569	.2952647	.3786332	.4672803	.5566605	.6429958	.7218865	.7907739
44	.1679245	.2324688	.3080664	.3820465	.4606594	.5405839	.6215466	.7015908
45	.1240776	.1780630	.2441614	.3208738	.4053930	.4939116	.5821387	.6659083

46	.0890436	.1325966	.1883402	.2559286	.3336841	.4186732	.5070408	.5945301
47	.0620350	.0959360	.1412935	.1987487	.2677653	.3464950	.4318881	.5200485
48	.0419393	.0674064	.1030348	.1501610	.2092828	.2796671	.3593049	.4450387
49	.0275050	.0459732	.0729740	.1103038	.1591925	.2193151	.2916300	.3721125
50	.0174937	.0304251	.0501882	.0787333	.1177675	.1683823	.2307023	.3036511
51	.0107876	.0195321	.0335021	.0545819	.0846801	.1254106	.1777850	.2415795
52	.0064443	.0121600	.0216984	.0367347	.0591514	.0908103	.1332883	.1872161
53	.0037357	.0073398	.0136314	.0239928	.0401218	.0638942	.0971202	.1412164
54	.0020971	.0042945	.0083042	.0152027	.0264152	.0436621	.0688079	.1036065
55	.0011406	.0024352	.0049044	.0093426	.0168746	.0289654	.0473544	.0736900

56	.0006010	.0013380	.0028075	.0055665	.0104563	.0186476	.0316432	.0511974
57	.0003067	.0007122	.0015575	.0032155	.0062830	.0116462	.0205821	.0344488
58	.0001516	.0003672	.0008371	.0018300	.0036600	.0070839	.0129129	.0224984
59	.0000725	.0001834	.0004359	.0009763	.0020664	.0041422	.0078803	.0142572
60	.0000336	.0000887	.0002198	.0005130	.0011305	.0023576	.0046627	.0087630
61	.0000151	.0000415	.0001073	.0002611	.0005992	.0013003	.0026741	.0052324
62	.0000065	.0000188	.0000507	.0001287	.0003076	.0006947	.0014861	.0030167
63	.0000027	.0000083	.0000232	.0000614	.0001529	.0003595	.0008001	.0016885
64	.0000011	.0000035	.0000103	.0000284	.0000736	.0001801	.0004171	.0009155
65	.0000004	.0000014	.0000044	.0000127	.0000343	.0000874	.0002106	.0004807

66	.0000002	.0000006	.0000018	.0000055	.0000154	.0000410	.0001029	.0002444
67	.0000001	.0000002	.0000007	.0000023	.0000067	.0000186	.0000487	.0001202
68		.0000001	.0000003	.0000009	.0000028	.0000082	.0000223	.0000579
69			.0000001	.0000004	.0000012	.0000035	.0000098	.0000264
70				.0000001	.0000005	.0000014	.0000048	.0000117
71				.0000001	.0000002	.0000006	.0000017	.0000050
72					.0000001	.0000002	.0000007	.0000021
73						.0000001	.0000003	.0000008
74							.0000001	.0000003
75								.0000001

p	.41	.42	.43	.44	.45	.46	.47	.48
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000

n = 117

	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000

$$P(x, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

x	.49	.50
15	1.0000000	1.0000000
16	1.0000000	1.0000000
17	1.0000000	1.0000000
18	1.0000000	1.0000000
19	1.0000000	1.0000000
20	1.0000000	1.0000000
21	1.0000000	1.0000000
22	1.0000000	1.0000000
23	1.0000000	1.0000000
24	1.0000000	1.0000000
25	1.0000000	1.0000000
26	1.0000000	1.0000000
27	1.0000000	1.0000000
28	1.0000000	1.0000000
29	1.0000000	1.0000000
30	.9999999	1.0000000
31	.9999998	.9999999
32	.9999994	.9999998
33	.9999985	.9999993
34	.9999963	.9999987
35	.9999910	.9999964
36	.9999788	.9999917
37	.9999582	.9999807
38	.9999262	.9999644
39	.9997889	.9999353
40	.9995624	.9998019
41	.9991424	.9996008
42	.9984042	.9992214
43	.9971085	.9985359
44	.9949373	.9973404
45	.9914288	.9953296
46	.9859603	.9920478
47	.9777371	.9869622
48	.9658016	.9793496
49	.9490783	.9680030
50	.9264527	.9521636
51	.8968885	.9306834
52	.8595784	.9033858
53	.8140671	.8644088
54	.7504472	.8233602
55	.6993898	.7701543
56	.6321940	.7103549
57	.5407162	.6441484
58	.4273221	.5732958
59	.4141753	.5000000
60	.3439930	.4267042
61	.2788107	.3558516
62	.2208911	.2896451
63	.1695075	.2298457
64	.1269113	.1776398
65	.0923802	.1338912
66	.0653282	.0976743
67	.0448203	.0693766
68	.0288740	.0478364
69	.0152938	.0319980
70	.0080750	.0207504
71	.0033190	.0130378
72	.0012942	.0079328
73	.0004575	.0046704
74	.0013378	.0026896
75	.0007096	.0014441
76	.0003635	.0007786
77	.0001798	.0003998
78	.0000858	.0001981
79	.0000395	.0000947
80	.0000175	.0000436
81	.0000075	.0000193
82	.0000031	.0000083
83	.0000012	.0000034
84	.0000005	.0000013
85	.0000002	.0000005
86	.0000001	.0000002
87		.0000001

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$$P(x, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 110

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.6945410	.9078115	.9725170	.9919089	.9976483	.9993853	.9998090	.9999467
2	.3304504	.6858064	.8722181	.9521279	.9830489	.9942438	.9981128	.9993995
3	.1153189	.4207596	.6907494	.8551616	.9380736	.9752693	.9906439	.9966159
4	.0312912	.2114069	.4737354	.6989381	.8465571	.9308438	.9768065	.9917255
5	.0068893	.0888898	.2807719	.5117953	.7080782	.8424990	.9218678	.9638558
6	.0012694	.0317888	.1447028	.3340097	.5419036	.7174296	.8411417	.9174685
7	.0002004	.0058418	.0654460	.1944974	.3771867	.5670803	.7267083	.8414969
8	.0000276	.0026755	.0288262	.1014892	.2384776	.4135320	.5888959	.7357974
9	.0000034	.0006462	.0033960	.0477188	.1371836	.2775437	.4440710	.6082685
10	.0000004	.0001401	.0030341	.0203358	.0720236	.1714536	.3123669	.4727307
11		.0000275	.0008894	.0074993	.0346484	.0976420	.2039386	.3442643
12		.0000049	.0003388	.0028116	.0133258	.0313848	.0634620	.1045855
13		.0000008	.0000586	.0002214	.0008605	.0250575	.0697845	.1495447
14		.0000001	.0000033	.0000273	.0001358	.0004353	.0135183	.0499483
15			.0000008	.0000078	.0000345	.0001357	.0180519	.0499483
16			.0000005	.0000086	.0000741	.0001928	.00063106	.0262148
17			.0000001	.0000050	.0000843	.0000999	.0003505	.0129447
18				.0000012	.0000243	.0000431	.0001459	.0006805
19				.0000003	.0000066	.00000795	.0000586	.0002640
20				.0000001	.0000017	.0000075	.00002019	.00010958
21					.0000004	.0000071	.0000490	.0004308
22					.0000001	.0000020	.0000324	.0001602
23						.0000005	.0000069	.0000364
24							.0000020	.0000190
25							.0000006	.0000061
26							.0000001	.0000019
27								.0000005
28								.0000002

x	.09	.10	.11	.12	.13	.14	.15	.16
1	.9999853	.9999960	.9999939	.9999997	.9999999	1.0000000	1.0000000	1.0000000
2	.9999139	.9999437	.9999834	.9999952	.9999986	.9999996	.9999999	1.0000000
3	.9998224	.9998040	.9998709	.9998591	.9998974	.9999248	.9999589	.9999997
4	.99950304	.9991443	.9993334	.9997688	.999924	.9999747	.9999910	.9999975
5	.9842484	.9934814	.9974233	.9990228	.9996431	.9998742	.9999571	.9999858
6	.9599354	.9816686	.9920409	.9967033	.9986918	.9995010	.9998166	.9999349
7	.9146493	.9569493	.9795120	.9907464	.9960148	.9983569	.9993495	.9997581
8	.8429877	.9130040	.9547358	.9777495	.9896137	.9953765	.9980309	.9991951
9	.7446498	.8452549	.9122475	.9531587	.9763431	.9886459	.9948021	.9977831
10	.6257799	.7532499	.8480641	.9121742	.9521068	.9732534	.9878380	.9942962
11	.4976355	.6418217	.7615969	.8512562	.9126132	.9514255	.9744425	.9871814
12	.3735036	.5202637	.6366703	.7696967	.8547199	.9135075	.9512331	.9736756
13	.2634710	.3998312	.5410349	.6705277	.7775586	.8583747	.9147124	.9512770
14	.1749800	.2907814	.4245001	.5608628	.6835462	.7851931	.8642128	.9161788
15	.1093411	.1997965	.3164762	.4474920	.5781874	.6958434	.79726106	.86660385
16	.0643316	.1297507	.2239074	.3408723	.4690341	.5949960	.7075121	.7998215
17	.0356751	.0794485	.1502554	.2472771	.3640367	.4893115	.6108377	.7186867
18	.0186701	.0463471	.0956371	.1706993	.2699012	.3860847	.5084766	.6256328
19	.0098333	.0243227	.0577588	.1121056	.1909740	.3179336	.4717190	.6266568
20	.0043211	.0132447	.0331189	.0700528	.1289018	.2110056	.3129789	.4278310
21	.0019163	.0065466	.0180443	.0416671	.0829898	.1485956	.2307447	.3334873
22	.0008044	.0030738	.0093495	.0230035	.0509746	.0964497	.1630824	.2503995
23	.0003824	.0013784	.0046114	.0127429	.0298819	.0609823	.1103894	.1801786
24	.0001827	.0006834	.0021671	.0065414	.0167267	.0368387	.0715178	.1245416
25	.0000444	.0002363	.0009713	.0032248	.0089457	.0212906	.0444057	.0825931
26	.0000154	.0000913	.0004156	.0015140	.0045741	.0117773	.0264164	.0585500
27	.0000051	.0000337	.0001699	.0006796	.0022375	.0063378	.0150612	.0330810
28	.0000016	.0000119	.0000664	.0002918	.0010478	.0031651	.0082332	.0187961
29	.0000005	.0000040	.0000248	.0001200	.0004701	.0015395	.0043178	.0105721
30	.0000001	.0000013	.0000089	.0000473	.0002023	.0007181	.0021725	.0057106
31		.0000004	.0000031	.0000179	.0000814	.0003215	.0010497	.0029634
32		.0000001	.0000010	.0000065	.0000330	.0001382	.0004872	.0014780
33			.0000003	.0000023	.0000126	.0000571	.0002173	.0007088
34			.0000001	.0000008	.0000046	.0000227	.0000932	.0003270
35				.0000002	.0000016	.0000087	.0000385	.0001452
36				.0000001	.0000005	.0000032	.0000153	.0000620
37				.0000002	.0000011	.0000004	.0000022	.0000101
38				.0000001	.0000004	.0000001	.0000003	.0000014
39					.0000001			
40								
41							.0000001	.0000005
42								.0000002
43								.0000001

x	.17	.18	.19	.20	.21	.22	.23	.24
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	.9999993	.9999998	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
5	.9999954	.9999986	.9999996	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
6	.9999776	.9999936	.9999976	.9999992	.9999998	.9999999	1.0000000	1.0000000
7	.9999089	.9999676	.9999889	.9999963	.9999989	.9999996	.9999999	1.0000000
8	.9998335	.9998801	.9999361	.9999845	.9999947	.9999982	.9999994	.9999998
9	.9997432	.9998134	.9998946	.9999435	.9999795	.9999928	.9999987	.9999996
10	.9974402	.9989980	.9995443	.9998184	.9999302	.9999741	.9999907	.9999968
11	.9938615	.9971864	.9987689	.9994773	.9997874	.9999167	.9999685	.9999885
12	.9866649	.9934973	.9966640	.9986408	.9994148	.9997576	.9999033	.9999628
13	.9735216	.9868767	.9938013	.9967741	.9985314	.9993575	.9997296	.9998904
14	.9515716	.9733526	.9860048	.9923701	.9966167	.9984375	.9993065	.9997039
15	.9178531	.9520753	.9733442	.9858376	.9927995	.9964911	.9983388	.9992623
16	.8699701	.9196922	.9527538	.9734747	.9857642	.9926850	.9963961	.9982554
17	.8068353	.8739314	.9216617	.9535780	.9737251	.9857741	.99286219	.9963899

$$P(e, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 112

	.25	.26	.27	.28	.29	.30	.31	.32
5	.00000001	.00000005	.00000017	.00000036	.00000074	.00000150	.00000334	.00000733
6	.00000002	.00000009	.00000027	.00000053	.00000107	.00000214	.00000428	.00000856
7	.00000001	.00000004	.00000012	.00000025	.00000050	.00000100	.00000199	.00000379
8		.00000001	.00000003	.00000007	.00000013	.00000025	.00000042	.00000074
9			.00000001	.00000002	.00000004	.00000008	.00000015	.00000025
10				.00000001	.00000002	.00000004	.00000007	.00000012
11					.00000001	.00000002	.00000004	.00000007
12						.00000001	.00000002	.00000004
13							.00000001	.00000002
14								.00000001
15								.00000001
16								.00000001
17								.00000001
18								.00000001
19								.00000001
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102								.00000001
103								.00000001
104								.00000001
105								.00000001
106								.00000001
107								.00000001
108								.00000001
109								.00000001
110								.00000001
111								.00000001
112								.00000001

$$P(n, h, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 110

h	.49	.50
12	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	1.00000000	1.00000000
19	1.00000000	1.00000000
20	1.00000000	1.00000000
21	1.00000000	1.00000000
22	1.00000000	1.00000000
23	1.00000000	1.00000000
24	1.00000000	1.00000000
25	1.00000000	1.00000000
26	1.00000000	1.00000000
27	1.00000000	1.00000000
28	1.00000000	1.00000000
29	1.00000000	1.00000000
30	1.00000000	1.00000000
31	.99999999	1.00000000
32	.99999999	.99999999
33	.99999999	.99999999
34	.99999999	.99999999
35	.99999999	.99999999
36	.99999999	.99999999
37	.99999999	.99999999
38	.99999999	.99999999
39	.99999999	.99999999
40	.99999999	.99999999
41	.99999999	.99999999
42	.99999999	.99999999
43	.99999999	.99999999
44	.99999999	.99999999
45	.99999999	.99999999
46	.99999999	.99999999
47	.99999999	.99999999
48	.99999999	.99999999
49	.99999999	.99999999
50	.99999999	.99999999
51	.99999999	.99999999
52	.99999999	.99999999
53	.99999999	.99999999
54	.99999999	.99999999
55	.99999999	.99999999
56	.99999999	.99999999
57	.99999999	.99999999
58	.99999999	.99999999
59	.99999999	.99999999
60	.99999999	.99999999
61	.99999999	.99999999
62	.99999999	.99999999
63	.99999999	.99999999
64	.99999999	.99999999
65	.99999999	.99999999
66	.99999999	.99999999
67	.99999999	.99999999
68	.99999999	.99999999
69	.99999999	.99999999
70	.99999999	.99999999
71	.99999999	.99999999
72	.99999999	.99999999
73	.99999999	.99999999
74	.99999999	.99999999
75	.99999999	.99999999
76	.99999999	.99999999
77	.99999999	.99999999
78	.99999999	.99999999
79	.99999999	.99999999
80	.99999999	.99999999
81	.99999999	.99999999
82	.99999999	.99999999
83	.99999999	.99999999
84	.99999999	.99999999
85	.99999999	.99999999
86	.99999999	.99999999
87	.99999999	.99999999

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

11 = 114

[illegible]

	.09	.10	.11	.12	.13	.14	.15	.16
1	.99999666	.99999664	.99999991	.99999998	.99999999	1.00000000	1.00000000	1.00000000
2	.99998294	.99999490	.99999851	.99999957	.99999988	.99999997	.99999999	1.00000000
3	.99999116	.99996380	.99998433	.99999634	.99999889	.99999967	.99999990	.99999997
4	.99997717	.99992903	.99991925	.99997916	.99999308	.99999791	.99999930	.99999977
5	.99998167	.99994477	.99996334	.99991123	.99996794	.99998863	.99999623	.99999877
6	.99991236	.99988499	.99992639	.99999816	.99988155	.99955533	.99998376	.99999430
7	.99987350	.99948213	.99980902	.99914612	.99963686	.9995171	.9994196	.99978113
8	.8494372	.99173985	.9574612	.9793091	.9904458	.9997941	.9982897	.99998648
9	.7535002	.8520398	.9169212	.9561096	.9780683	.9955882	.9952864	.9997586
10	.6364782	.7624804	.8551843	.9170923	.9552575	.9771283	.99888826	.9994844
11	.5091685	.6599546	.7711083	.8585664	.9177639	.9548164	.9764518	.9983198
12	.3844025	.5384195	.6682102	.7794038	.8622484	.9188250	.9547145	.9760046
13	.2733470	.4110744	.5373348	.6424280	.7275578	.8066093	.9201905	.9518925
14	.1829448	.3016324	.4373189	.5734946	.6957678	.7954385	.8700448	.9247948
15	.1152488	.2080890	.3283386	.4610845	.5910840	.7083523	.8030433	.8740609
16	.0683824	.1367533	.2240900	.3536866	.4832240	.6091146	.7202769	.8104168
17	.0382348	.0745585	.117871	.2385085	.3776864	.5041073	.6233339	.7314177
18	.0202006	.0459873	.0784451	.1798886	.2821388	.4005365	.5238308	.6406798
19	.0108088	.0275051	.0519254	.1191369	.2012346	.3049944	.4223287	.5485814
20	.0047638	.0144625	.0368293	.0750991	.1369712	.2283160	.3270999	.4433190
21	.0021388	.0072166	.0197085	.0480734	.0889584	.1550196	.2430798	.3484863
22	.0009063	.0034811	.0113060	.0287711	.0551365	.1033735	.1731807	.2634919
23	.0003660	.0013948	.0041394	.0101468	.0234458	.0457823	.0791377	.1234378
24	.0001496	.0005683	.0023360	.0073032	.0184369	.0403095	.0773390	.1334335
25	.0000515	.0002710	.0011028	.0036852	.0095973	.0234666	.0484784	.0893049
26	.00000180	.00001858	.0004767	.0017193	.0051424	.0131092	.0291148	.0573569
27	.00000060	.00000395	.0001969	.0007797	.0025413	.0070134	.0167645	.0353561
28	.00000017	.00000141	.0000778	.0003384	.0011028	.0035953	.0098874	.0209817
29	.00000004	.00000048	.0000244	.0001042	.0003458	.0011723	.0034984	.0091887
30	.00000000	.00000016	.0000107	.0000560	.0002370	.0008331	.0024948	.0064084
31		.00000005	.0000037	.0000214	.0000986	.0003770	.0012181	.0034030
32		.00000001	.00000012	.00000078	.0000396	.0001639	.0005716	.0017157
33			.00000004	.00000028	.0000158	.0000684	.0002578	.0008319
34			.00000001	.00000009	.00000056	.00000375	.0000118	.0003861
35				.00000003	.00000020	.00000106	.00000467	.0001743
36				.00000001	.00000007	.00000039	.00000188	.0000753
37					.00000002	.00000014	.00000073	.0000314
38					.00000001	.00000005	.0000002	.0000001
39						.00000002	.00000010	.00000049
40						.00000001	.00000003	.00000018
41							.00000001	.00000007
42								.00000003
43								.00000001

	.17	.18	.19	.20	.21	.22	.23	.24
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	.99999994	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	.99999987	.99999996	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
6	.99999981	.99999993	.99999998	.99999994	.99999998	.99999999	1.00000000	1.00000000
7	.99999986	.99999991	.99999995	.99999969	.99999990	.99999997	.99999999	1.00000000
8	.99999981	.99999989	.99999983	.99999968	.99999976	.99999985	.99999991	.99999999
9	.99999981	.99999984	.99999985	.99999951	.99999987	.99999990	.99999998	.99999999
10	.99999977	.99999986	.99999961	.99999944	.99999946	.99999978	.99999983	.99999974
11	.99944699	.99749445	.99891113	.99954555	.99981174	.99999393	.99999736	.99999908
12	.99878883	.99416113	.99733060	.99880716	.99949330	.99997926	.99999183	.99999630
13	.99757860	.99873764	.99334121	.99714733	.99871699	.99944556	.99976995	.99990777
14	.99533031	.97567900	.98737129	.99377309	.99701188	.99866399	.99940038	.99974687
15	.98358888	.95890588	.97547497	.98786441	.99360111	.99869193	.99888765	.99934683
16	.87811102	.92858212	.95866600	.97594733	.98734416	.99353283	.99888478	.99858757
17	.81717502	.88921884	.92756956	.95735774	.97625333	.98729445	.99348899	.99680016
18	.74824378	.82430997	.86838167	.92970281	.95858539	.98363517	.99741166	.99349959

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 119

r	.17	.18	.19	.20	.21	.22	.23	.24
19	.6552382	.7527880	.8312501	.8902404	.9318977	.9596415	.9771884	.9875903
20	.5602973	.6690973	.7627116	.8377980	.8942282	.9341377	.9607973	.9776709
21	.4630688	.5772417	.6823270	.7722449	.8441611	.8981707	.9364067	.9620066
22	.3691871	.4821855	.5934360	.6949860	.7814188	.8503465	.9020607	.9386919
23	.2835317	.3892370	.5005544	.6089476	.7071244	.7902397	.8536607	.9058922
24	.2095423	.3031881	.4086699	.5182332	.6238346	.7187852	.7987905	.8622094
25	.1469245	.2276331	.3224573	.4275188	.5352732	.6381474	.7300054	.8070310
26	.1017448	.1646091	.2456110	.3413401	.4458151	.5517201	.6519298	.7408170
27	.06688082	.1145919	.1804413	.2634479	.3598411	.4635882	.5676145	.6658805
28	.0421609	.0767741	.1277870	.1963740	.2811224	.3779671	.4808657	.5829926
29	.0257350	.0494978	.0872051	.1412776	.2123680	.2986186	.3957265	.4976735
30	.0149131	.0307095	.0573345	.0980554	.1550177	.2288307	.3159251	.4131287
31	.0083625	.0183367	.0363144	.0656388	.1092827	.1689670	.2444147	.3330335
32	.0045106	.0105392	.0223587	.0423720	.0743720	.1120481	.1630902	.2260417
33	.0023410	.0058322	.0130275	.0263761	.0488642	.0835251	.1271164	.1873563
34	.0011695	.0031032	.0073806	.0158333	.0309832	.0557721	.0930479	.1448356
35	.0005626	.0015957	.0040302	.0091666	.0189604	.0359725	.0636767	.1029200
36	.0002607	.0007894	.0021216	.0051189	.0111965	.0224101	.0413352	.0707589
37	.0001164	.0003764	.0010770	.0027378	.0063848	.0134844	.0261019	.0470618
38	.0000501	.0001731	.0005273	.0014336	.0035141	.0078371	.0160884	.0302739
39	.0000208	.0000768	.0002491	.0007193	.0018674	.0043999	.0094837	.0188344
40	.0000083	.0000328	.0001136	.0003484	.0009583	.0023864	.0054236	.0113516
41	.0000032	.0000136	.0000500	.0001629	.0004750	.0012305	.0029980	.0065929
42	.0000012	.0000054	.0000212	.0000736	.0002274	.0006338	.0016020	.0037026
43	.0000004	.0000021	.0000087	.0000282	.0000913	.0002509	.0006276	.0016186
44	.0000001	.0000008	.0000035	.0000135	.0000470	.0001466	.0004134	.0010624
45	.0000001	.0000003	.0000013	.0000055	.0000203	.0000670	.0001996	.0005408
46		.0000001	.0000005	.0000022	.0000085	.0000396	.0000933	.0002463
47			.0000002	.0000008	.0000034	.0000187	.0000481	.0001269
48			.0000001	.0000003	.0000013	.0000062	.0000284	.0000785
49				.0000001	.0000005	.0000021	.0000098	.0000341
50					.0000002	.0000008	.0000032	.0000113
51					.0000001	.0000003	.0000013	.0000047
52						.0000001	.0000002	.0000007
53							.0000001	.0000003
54								.0000001
55								.0000001

r	.25	.26	.27	.28	.29	.30	.31	.32
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	.99999991	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	.99999967	.99999989	.99999996	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
12	.99999886	.99999986	.99999995	.99999998	.99999999	1.00000000	1.00000000	1.00000000
13	.99999804	.99999986	.99999992	.99999995	.99999998	.99999999	.99999999	1.00000000
14	.99999722	.99999981	.99999989	.99999994	.99999998	.99999999	.99999999	.99999999
15	.99999640	.99999972	.99999981	.99999986	.99999993	.99999998	.99999999	.99999999
16	.99999558	.99999957	.99999965	.99999972	.99999981	.99999993	.99999998	.99999999
17	.99999476	.99999914	.99999922	.99999930	.99999945	.99999960	.99999978	.99999991
18	.99999394	.99999832	.99999840	.99999855	.99999870	.99999890	.99999916	.99999943
19	.99999312	.99999750	.99999758	.99999773	.99999793	.99999824	.99999860	.99999897
20	.99999230	.99999668	.99999676	.99999691	.99999711	.99999746	.99999786	.99999823
21	.99999148	.99999586	.99999594	.99999609	.99999629	.99999660	.99999700	.99999737
22	.99999066	.99999504	.99999512	.99999527	.99999547	.99999582	.99999622	.99999659
23	.99998984	.99999422	.99999430	.99999445	.99999465	.99999500	.99999540	.99999577
24	.99998902	.99999340	.99999348	.99999363	.99999383	.99999418	.99999458	.99999495
25	.99998820	.99999258	.99999266	.99999281	.99999301	.99999336	.99999376	.99999413
26	.99998738	.99999176	.99999184	.99999199	.99999219	.99999254	.99999294	.99999331
27	.99998656	.99999094	.99999102	.99999117	.99999137	.99999172	.99999212	.99999249
28	.99998574	.99999012	.99999020	.99999035	.99999055	.99999090	.99999130	.99999167
29	.99998492	.99998930	.99998938	.99998953	.99998973	.99999008	.99999048	.99999085
30	.99998410	.99998848	.99998856	.99998871	.99998891	.99998926	.99998966	.99999003
31	.99998328	.99998766	.99998774	.99998789	.99998809	.99998844	.99998884	.99998921
32	.99998246	.99998684	.99998692	.99998707	.99998727	.99998762	.99998802	.99998839
33	.99998164	.99998602	.99998610	.99998625	.99998645	.99998680	.99998720	.99998757
34	.99998082	.99998520	.99998528	.99998543	.99998563	.99998598	.99998638	.99998675
35	.99998000	.99998438	.99998446	.99998461	.99998481	.99998516	.99998556	.99998593
36	.99997918	.99998356	.99998364	.99998379	.99998399	.99998434	.99998474	.99998511
37	.99997836	.99998274	.99998282	.99998297	.99998317	.99998352	.99998392	.99998429
38	.99997754	.99998192	.99998200	.99998215	.99998235	.99998270	.99998310	.99998347
39	.99997672	.99998110	.99998118	.99998133	.99998153	.99998188	.99998228	.99998265
40	.99997590	.99998028	.99998036	.99998051	.99998071	.99998106	.99998146	.99998183
41	.99997508	.99997946	.99997954	.99997969	.99997989	.99998024	.99998064	.99998101
42	.99997426	.99997864	.99997872	.99997887	.99997907	.99997942	.99997982	.99998019
43	.99997344	.99997782	.99997790	.99997805	.99997825	.99997860	.99997900	.99997937
44	.99997262	.99997700	.99997708	.99997723	.99997743	.99997778	.99997818	.99997855
45	.99997180	.99997618	.99997626	.99997641	.99997661	.99997696	.99997736	.99997773
46	.99997098	.99997536	.99997544	.99997559	.99997579	.99997614	.99997654	.99997691
47	.99997016	.99997454	.99997462	.99997477	.99997497	.99997532	.99997572	.99997609
48	.99996934	.99997372	.99997380	.99997395	.99997415	.99997450	.99997490	.99997527
49	.99996852	.99997290	.99997298	.99997313	.99997333	.99997368	.99997408	.99997445
50	.99996770	.99997208	.99997216	.99997231	.99997251	.99997286	.99997326	.99997363
51	.99996688	.99997126	.99997134	.99997149	.99997169	.99997204	.99997244	.99997281
52	.99996606	.99997044	.99997052	.99997067	.99997087	.99997122	.99997162	.99997199
53	.99996524	.99996962	.99996970	.99996985	.99997005	.99997040	.99997080	.99997117
54	.99996442	.99996880	.99996888	.99996903	.99996923	.99996958	.99996998	.99997035
55	.99996360	.99996798	.99996806	.99996821	.99996841	.99996876	.99996916	.99996953
56	.99996278	.99996716	.99996724	.99996739	.99996759	.99996794	.99996834	.99996871
57	.99996196	.99996634	.99996642	.99996657	.99996677	.99996712	.99996752	.99996789
58	.99996114	.99996552	.99996560	.99996575	.99996595	.99996630	.99996670	.99996707
59	.99996032	.99996470	.99996478	.99996493	.99996513	.99996548	.99996588	.99996625
60	.99995950	.99996388	.99996396	.99996411	.99996431	.99996466	.99996506	.99996543
61	.99995868	.99996306	.99996314	.99996329	.99996349	.99996384	.99996424	.99996461
62	.99995786	.99996224	.99996232	.99996247	.99996267	.99996302	.99996342	.99996379
63	.99995704	.99996142	.99996150	.99996165	.99996185	.99996220	.99996260	.99996297
64	.99995622	.99996060	.99996068	.99996083	.99996103	.99996138	.99996178	.99996215
65	.99995540	.99995978	.99995986	.99995999	.99996019	.99996054	.99996094	.99996131
66	.99995458	.99995896	.99995904	.99995919	.99995939	.99995974	.99996014	.99996051
67	.99995376	.99995814	.99995822	.99995837	.99995857	.99995892	.99995932	.99995969
68	.99995294	.99995732	.99995740	.99995755	.99995775	.99995810	.99995850	.99995887
69	.99995212	.99995650	.99995658	.99995673	.99995693	.99995728	.99995768	.99995805
70	.99995130	.99995568	.99995576	.99995591	.99995611	.99995646	.99995686	.99995723
71	.99995048	.99995486	.99995494	.99995509	.99995529	.99995564	.99995604	.999

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 119

	.25	.26	.27	.28	.29	.30	.31	.32
57	.00000001	.00000002	.00000009	.00000032	.0000104	.0000309	.0000858	.0002198
58		.00000001	.00000004	.00000013	.0000044	.0000138	.0000398	.0001071
59			.00000001	.00000005	.0000018	.0000060	.0000180	.0000507
60				.00000002	.00000007	.0000025	.0000079	.0000232
61				.00000001	.00000003	.0000010	.0000034	.0000103
62					.00000001	.00000004	.0000014	.0000044
63						.00000002	.0000005	.0000018
64						.00000001	.0000002	.0000007
65							.00000001	.0000003
66								.0000001
	.33	.34	.35	.36	.37	.38	.39	.40
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
14	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
15	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
16	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
17	.99999994	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
18	.99999991	.99999994	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
19	.99999987	.99999990	.99999993	.99999996	.99999999	1.00000000	1.00000000	1.00000000
20	.99999982	.99999985	.99999988	.99999991	.99999994	.99999997	1.00000000	1.00000000
21	.99999977	.99999980	.99999983	.99999986	.99999989	.99999992	.99999995	1.00000000
22	.99999972	.99999975	.99999978	.99999981	.99999984	.99999987	.99999990	.99999993
23	.99999967	.99999970	.99999973	.99999976	.99999979	.99999982	.99999985	.99999988
24	.99999962	.99999965	.99999968	.99999971	.99999974	.99999977	.99999980	.99999983
25	.99999957	.99999960	.99999963	.99999966	.99999969	.99999972	.99999975	.99999978
26	.99999952	.99999955	.99999958	.99999961	.99999964	.99999967	.99999970	.99999973
27	.99999947	.99999950	.99999953	.99999956	.99999959	.99999962	.99999965	.99999968
28	.99999942	.99999945	.99999948	.99999951	.99999954	.99999957	.99999960	.99999963
29	.99999937	.99999940	.99999943	.99999946	.99999949	.99999952	.99999955	.99999958
30	.99999932	.99999935	.99999938	.99999941	.99999944	.99999947	.99999950	.99999953
31	.99999927	.99999930	.99999933	.99999936	.99999939	.99999942	.99999945	.99999948
32	.99999922	.99999925	.99999928	.99999931	.99999934	.99999937	.99999940	.99999943
33	.99999917	.99999920	.99999923	.99999926	.99999929	.99999932	.99999935	.99999938
34	.99999912	.99999915	.99999918	.99999921	.99999924	.99999927	.99999930	.99999933
35	.99999907	.99999910	.99999913	.99999916	.99999919	.99999922	.99999925	.99999928
36	.99999902	.99999905	.99999908	.99999911	.99999914	.99999917	.99999920	.99999923
37	.99999897	.99999900	.99999903	.99999906	.99999909	.99999912	.99999915	.99999918
38	.99999892	.99999895	.99999898	.99999901	.99999904	.99999907	.99999910	.99999913
39	.99999887	.99999890	.99999893	.99999896	.99999899	.99999902	.99999905	.99999908
40	.99999882	.99999885	.99999888	.99999891	.99999894	.99999897	.99999900	.99999903
41	.99999877	.99999880	.99999883	.99999886	.99999889	.99999892	.99999895	.99999898
42	.99999872	.99999875	.99999878	.99999881	.99999884	.99999887	.99999890	.99999893
43	.99999867	.99999870	.99999873	.99999876	.99999879	.99999882	.99999885	.99999888
44	.99999862	.99999865	.99999868	.99999871	.99999874	.99999877	.99999880	.99999883
45	.99999857	.99999860	.99999863	.99999866	.99999869	.99999872	.99999875	.99999878
46	.99999852	.99999855	.99999858	.99999861	.99999864	.99999867	.99999870	.99999873
47	.99999847	.99999850	.99999853	.99999856	.99999859	.99999862	.99999865	.99999868
48	.99999842	.99999845	.99999848	.99999851	.99999854	.99999857	.99999860	.99999863
49	.99999837	.99999840	.99999843	.99999846	.99999849	.99999852	.99999855	.99999858
50	.99999832	.99999835	.99999838	.99999841	.99999844	.99999847	.99999850	.99999853
51	.99999827	.99999830	.99999833	.99999836	.99999839	.99999842	.99999845	.99999848
52	.99999822	.99999825	.99999828	.99999831	.99999834	.99999837	.99999840	.99999843
53	.99999817	.99999820	.99999823	.99999826	.99999829	.99999832	.99999835	.99999838
54	.99999812	.99999815	.99999818	.99999821	.99999824	.99999827	.99999830	.99999833
55	.99999807	.99999810	.99999813	.99999816	.99999819	.99999822	.99999825	.99999828
56	.99999802	.99999805	.99999808	.99999811	.99999814	.99999817	.99999820	.99999823
57	.99999797	.99999800	.99999803	.99999806	.99999809	.99999812	.99999815	.99999818
58	.99999792	.99999795	.99999798	.99999801	.99999804	.99999807	.99999810	.99999813
59	.99999787	.99999790	.99999793	.99999796	.99999799	.99999802	.99999805	.99999808
60	.99999782	.99999785	.99999788	.99999791	.99999794	.99999797	.99999800	.99999803
61	.99999777	.99999780	.99999783	.99999786	.99999789	.99999792	.99999795	.99999798
62	.99999772	.99999775	.99999778	.99999781	.99999784	.99999787	.99999790	.99999793
63	.99999767	.99999770	.99999773	.99999776	.99999779	.99999782	.99999785	.99999788
64	.99999762	.99999765	.99999768	.99999771	.99999774	.99999777	.99999780	.99999783
65	.99999757	.99999760	.99999763	.99999766	.99999769	.99999772	.99999775	.99999778
66	.99999752	.99999755	.99999758	.99999761	.99999764	.99999767	.99999770	.99999773
67	.99999747	.99999750	.99999753	.99999756	.99999759	.99999762	.99999765	.99999768
68	.99999742	.99999745	.99999748	.99999751	.99999754	.99999757	.99999760	.99999763
69	.99999737	.99999740	.99999743	.99999746	.99999749	.99999752	.99999755	.99999758
70	.99999732	.99999735	.99999738	.99999741	.99999744	.99999747	.99999750	.99999753
71	.99999727	.99999730	.99999733	.99999736	.99999739	.99999742	.99999745	.99999748
72	.99999722	.99999725	.99999728	.99999731	.99999734	.99999737	.99999740	.99999743
73	.99999717	.99999720	.99999723	.99999726	.99999729	.99999732	.99999735	.99999738
74	.99999712	.99999715	.99999718	.99999721	.99999724	.99999727	.99999730	.99999733
75	.99999707	.99999710	.99999713	.99999716	.99999719	.99999722	.99999725	.99999728
76	.99999702	.99999705	.99999708	.99999711	.99999714	.99999717	.99999720	.99999723

p. 119

	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000

$$P(x, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 119

x	.49	.50
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	1.00000000	1.00000000
19	1.00000000	1.00000000
20	1.00000000	1.00000000
21	1.00000000	1.00000000
22	1.00000000	1.00000000
23	1.00000000	1.00000000
24	1.00000000	1.00000000
25	1.00000000	1.00000000
26	1.00000000	1.00000000
27	1.00000000	1.00000000
28	1.00000000	1.00000000
29	1.00000000	1.00000000
30	1.00000000	1.00000000
31	.99999999	1.00000000
32	.99999997	.99999999
33	.99999993	.99999998
34	.99999982	.99999994
35	.99999954	.99999984
36	.99999891	.99999939
37	.99999748	.99999802
38	.99999440	.99999774
39	.99998801	.99999497
40	.99997527	.99998923
41	.99995079	.99997773
42	.99990547	.99995559
43	.99982461	.99991447
44	.99968549	.99984084
45	.99945460	.99971366
46	.99908485	.99950168
47	.99851345	.99916068
48	.99765071	.99861104
49	.99643176	.99781559
50	.99472087	.99664543
51	.99241955	.99507382
52	.98942810	.99289340
53	.98565961	.99042088
54	.98110464	.98643758
55	.97574403	.9803209
56	.96965721	.97682539
57	.96297364	.97087531
58	.95587622	.96429668
59	.94850066	.95728639
60	.94134594	.95000000
61	.93438896	.94273150
62	.92792400	.93570132
63	.92211329	.92912469
64	.91682144	.92317441
65	.91201571	.91796791
66	.90763349	.91356242
67	.90364971	.90995792
68	.90007117	.90710660
69	.89687179	.90496618
70	.89405565	.90331457
71	.8915712	.90216341
72	.88946742	.90136896
73	.88763375	.90083932
74	.88605973	.90049832
75	.8847384	.90028634
76	.88367704	.90015916
77	.88283980	.90008553
78	.88219994	.9000441
79	.8817061	.90002289
80	.8813449	.90001877
81	.88109202	.9000203
82	.88094087	.9000226
83	.88088036	.90002598
84	.88090015	.9000301
85	.88090006	.90003516
86	.88090008	.9000406
87	.88090001	.90004608
88		.90005201

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 120

	.01	.02	.03	.04	.05	.06	.07	.08
1	.7006106	.9114621	.9741412	.9925433	.9978776	.9994039	.9999348	.9999959
2	.3377143	.6946347	.8781705	.9552597	.9844728	.9943778	.9993429	.9999483
3	.1196165	.4313442	.7015645	.8628274	.9424946	.9774962	.9916613	.9970469
4	.0328449	.2199949	.4662443	.7134111	.8558244	.9318779	.9718798	.9881120
5	.0071833	.0938331	.2923714	.5267173	.7318087	.8526710	.9283287	.9675121
6	.0013837	.0340991	.1329181	.3482475	.5504516	.7322971	.8522788	.9247437
7	.0002222	.0107338	.0708526	.2057196	.3936620	.5850312	.7482638	.8534631
8	.0000311	.0029680	.0286154	.0900043	.2524136	.4319462	.6080751	.7528190
9	.0000039	.0007295	.0104260	.0520043	.1474065	.2932255	.4650986	.6285334
10	.0000004	.0001609	.0034253	.0225662	.0786299	.1842920	.3311599	.4943658
11		.0000321	.0010219	.0089181	.0384500	.1066156	.2192630	.3648642
12		.0000058	.0002786	.0032104	.0173026	.0570348	.1350396	.2522544
13		.0000010	.0000598	.0010778	.0071927	.0282485	.0774567	.1633089
14		.0000002	.0000161	.0000326	.0027721	.0130450	.0414496	.0990541
15			.0000035	.0000093	.0000940	.0056086	.0207358	.0563505
16			.0000007	.0000025	.0000336	.0022543	.0097181	.0301095
17			.0000001	.0000004	.0000104	.0000492	.0021350	.0081350
18				.0000001	.0000003	.0000306	.0017700	.0071690
19				.0000000	.0000000	.0000002	.0000690	.0032053
20				.0000000	.0000000	.0000000	.0000545	.0013549
21					.0000005	.0000009	.0000887	.0005424
22					.0000001	.0000006	.0000293	.0002059
23						.0000007	.0000098	.0000742
24						.0000003	.0000027	.0000255
25							.0000008	.0000083
26							.0000002	.0000026
27							.0000001	.0000008
28								.0000000
29								.0000001

	.09	.10	.11	.12	.13	.14	.15	.16
1	.9999878	.9999968	.9999992	.9999998	.9999999	1.0000000	1.0000000	1.0000000
2	.9999843	.9999957	.9999986	.9999996	.9999999	1.0000000	1.0000000	1.0000000
3	.9999812	.9999942	.9999981	.9999994	.9999999	1.0000000	1.0000000	1.0000000
4	.9999803	.9999930	.9999945	.9999982	.9999991	.9999998	.9999999	.9999999
5	.9861325	.9943819	.9978269	.9991938	.9997121	.9999008	.9999669	.9999892
6	.9642022	.9839597	.9931830	.9972373	.9989278	.9996002	.9998563	.9999502
7	.9226309	.9617641	.9821819	.9921236	.9966815	.9986621	.9994823	.9998078
8	.8556731	.9216001	.9600384	.9807673	.9918150	.9961753	.9984073	.9993588
9	.7621346	.8385677	.9213806	.9586935	.9796773	.9904570	.9957877	.9981707
10	.6470102	.7714084	.8619220	.9217744	.9582229	.9788727	.9908432	.9953428
11	.5206254	.6639131	.7803500	.8655893	.9226381	.9579401	.9783164	.9893337
12	.3958314	.5444740	.6795308	.7889737	.8694654	.9238638	.9579751	.9779750
13	.2833480	.4239209	.5663451	.6940747	.7972052	.8734757	.9253691	.9582707
14	.1910805	.3128566	.4501269	.5865666	.7077046	.8053302	.8776566	.9270903
15	.1213412	.2181634	.3403444	.4745209	.6053889	.7205444	.8130956	.8816963
16	.0726004	.1439607	.2444595	.3665496	.4973498	.6230079	.7326918	.8205993
17	.0409657	.0898864	.1666877	.2699275	.3914063	.5188003	.6395796	.7442256
18	.0218254	.0530944	.1078834	.1893230	.2945600	.4150364	.5390570	.6552299
19	.0109932	.0297133	.0662296	.1264271	.2117521	.3183703	.4375489	.5582293
20	.0052420	.0137668	.0369999	.0803836	.1453255	.2338909	.3413833	.4590407
21	.0023645	.0079412	.0214764	.0486764	.0952001	.1644411	.2556828	.3636307
22	.0010167	.0038007	.0113396	.0280874	.0595314	.1106040	.1836556	.2770910
23	.0004146	.0017304	.0057017	.0154531	.0355586	.0711452	.1264755	.2029422
24	.0001602	.0007503	.0027326	.0081123	.0202812	.0438052	.0834731	.1427127
25	.0000595	.0003101	.0012493	.0040665	.0110596	.0258105	.0528024	.0963671
26	.0000210	.0001233	.0005456	.0019480	.0057663	.0145592	.0320184	.0624686
27	.0000071	.0000461	.0002277	.0008924	.0028794	.0078668	.0186170	.0388762
28	.0000023	.0000146	.0000909	.0003913	.0013765	.0040738	.0103835	.0232312
29	.0000007	.0000057	.0000347	.0001643	.0006306	.0020230	.0055575	.0133323
30	.0000002	.0000019	.0000127	.0000662	.0002771	.0009639	.0028652	.0073523
31	.0000001	.0000006	.0000045	.0000255	.0001168	.0004409	.0014055	.0038956
32		.0000002	.0000015	.0000095	.0000473	.0001937	.0006685	.0019057
33		.0000001	.0000005	.0000034	.0000164	.0000818	.0003049	.0009733
34			.0000002	.0000012	.0000069	.0000332	.0001337	.0004591
35			.0000004	.0000024	.0000135	.0000710	.0003363	.0012085
36				.0000001	.0000009	.0000049	.0000289	.0000918
37				.0000000	.0000003	.0000018	.0000090	.0000384
38				.0000000	.0000001	.0000006	.0000034	.0000166
39					.0000000	.0000000	.0000012	.0000061
40					.0000000	.0000000	.0000004	.0000023
41						.0000001	.0000000	.0000008
42							.0000000	.0000003
43								.0000001

	.17	.18	.19	.20	.21	.22	.23	.24
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	.9999995	.9999998	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	.9999947	.9999980	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
6	.9999833	.9999946	.9999983	.9999995	.9999998	1.0000000	1.0000000	1.0000000
7	.9999708	.9999970	.9999997	.9999999	.9999999	.9999997	.9999999	1.0000000
8	.9999754	.9999908	.9999987	.9999989	.9999986	.9999988	.9999994	.9999999
9	.9999289	.9999703	.9999874	.9999987	.9999984	.9999980	.9999983	.9999998
10	.9979574	.9991410	.9996830	.9998601	.9999494	.9999817	.9999936	.9999998
11	.9930218	.9977703	.9990486	.9996051	.9998433	.9999401	.9999779	.9999981
12	.9890078	.9947613	.9978108	.9989552	.9996111	.9998287	.9999310	.9999741
13	.9778188	.9887617	.9948608	.9974794	.9988799	.9995817	.9998037	.9998884
14	.9588780	.9778805	.9886188	.9944142	.9973754	.9988171	.9994879	.9997868
15	.9288977	.9594645	.9779380	.9885573	.9943188	.9972778	.9987670	.9994596
16	.8888410	.9309903	.9608919	.9782106	.9885771	.9942697	.9978488	.9987893
17	.8278603	.8899719	.9330976	.9618373	.9808608	.9886646	.9948888	.9978188

$$P(n, p, P) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r} P$$

n = 120

	.17	.18	.19	.20	.21	.22	.23	.24
18	.7552099	.8348083	.8940736	.9352731	.9622723	.9789931	.9888111	.9942920
19	.6700621	.7656979	.8416936	.8981326	.9374259	.9633030	.9794940	.9890085
20	.5764373	.6841616	.7757339	.8482865	.9021300	.9397405	.9645534	.9800516
21	.4755976	.5937757	.6976000	.7853556	.8546752	.9060034	.9480165	.9657676
22	.3851470	.4992956	.6103253	.7104370	.7945947	.8606719	.9094603	.9442079
23	.2980931	.4059677	.5162019	.6261551	.7227263	.8034700	.8660717	.9137641
24	.2221205	.3186769	.4261280	.5363761	.6413255	.7345096	.8120117	.8766932
25	.1592395	.2412330	.3300377	.4266617	.5318711	.6356877	.7450260	.8202730
26	.1097653	.1759534	.2602110	.3585759	.4646013	.5707341	.6698072	.7567084
27	.0727474	.1235950	.1920335	.2790263	.3778957	.4829772	.5870070	.6833636
28	.0463509	.0835813	.1377913	.2097588	.2976533	.3968037	.5000179	.6027273
29	.0280393	.0544075	.0949157	.1522969	.2268065	.3160753	.4153085	.5181501
30	.0167254	.0340914	.0633099	.1066990	.1670613	.2430400	.3342794	.4334194
31	.0094761	.0205630	.0403082	.0721221	.1188670	.1820402	.2608621	.3522564
32	.0051655	.0119428	.0240403	.0470253	.0817009	.1314343	.1971948	.2778454
33	.0027099	.0066795	.0147624	.0316784	.0641169	.0917362	.1443024	.2124910
34	.0013687	.0035985	.0084535	.0179419	.0347302	.0610770	.1021716	.1574557
35	.0006657	.0016680	.0044660	.0104999	.0214058	.0403284	.0699701	.1129845
36	.0003120	.0009345	.0024843	.0059284	.0128288	.0253938	.0463357	.0784775
37	.0001409	.0004508	.0012755	.0032000	.0073957	.0154481	.0296642	.0527406
38	.0000614	.0002097	.0006318	.0016784	.0041169	.0091736	.0181637	.0343029
39	.0000258	.0000941	.0003020	.0008621	.0022132	.0051560	.0109890	.0215799
40	.0000104	.0000407	.0001393	.0004225	.0011492	.0028293	.0063574	.0131323
41	.0000041	.0000170	.0000621	.0002000	.0005765	.0015004	.0035559	.0077302
42	.0000016	.0000069	.0000267	.0001044	.0003109	.0008300	.0021005	.0052455
43	.0000006	.0000027	.0000111	.0000404	.0001169	.0003185	.0008186	.0021391
44	.0000002	.0000010	.0000045	.0000172	.0000593	.0001825	.0005086	.0013919
45	.0000001	.0000004	.0000017	.0000071	.0000259	.0000845	.0002488	.0006660
46		.0000001	.0000006	.0000028	.0000110	.0000379	.0001177	.0003322
47			.0000002	.0000014	.0000045	.0000164	.0000539	.0001663
48			.0000001	.0000007	.0000028	.0000108	.0000339	.0001149
49				.0000001	.0000007	.0000030	.0000102	.0000339
50				.0000001	.0000003	.0000011	.0000042	.0000148
51					.0000001	.0000004	.0000017	.0000063
52						.0000002	.0000007	.0000026
53						.0000001	.0000002	.0000010
54							.0000001	.0000004
55								.0000001
56								.0000001

	.25	.26	.27	.28	.29	.30	.31	.32
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	.9999997	.9999991	.9999997	.9999992	1.0000000	1.0000000	1.0000000	1.0000000
12	.9999996	.9999986	.9999994	.9999986	.9999999	1.0000000	1.0000000	1.0000000
13	.9999970	.9999981	.9999962	.9999987	.9999996	.9999999	1.0000000	1.0000000
14	.9999916	.9999967	.9999977	.9999956	.9999985	.9999998	.9999999	.9999999
15	.9999772	.9999076	.9999639	.9999864	.9999951	.9999970	.9999994	.9999998
16	.9999369	.9999701	.9999016	.9999612	.9999852	.9999946	.9999981	.9999993
17	.9998703	.9999420	.9999750	.9999074	.9999500	.9999846	.9999942	.9999979
18	.9997207	.9998689	.9999434	.9999734	.9999829	.9999950	.9999984	.9999998
19	.9994354	.9997219	.9998604	.9999403	.9999730	.9999893	.9999956	.9999982
20	.9982249	.9984465	.9992476	.9998602	.9999411	.9999736	.9999887	.9999957
21	.9806555	.9895272	.9945633	.9972917	.9987044	.9994045	.9997368	.9999382
22	.9670143	.9813566	.9898356	.9947018	.9973493	.9987264	.9994120	.9997302
23	.9465526	.9682835	.9819470	.9901695	.9948585	.9974186	.9987552	.9994332
24	.9174910	.9488021	.9695664	.9826594	.9905237	.9950305	.9974979	.9987900
25	.8783385	.9211376	.9510293	.9708554	.9833677	.9908939	.9952149	.9975866
26	.8288234	.8838129	.9247015	.9533280	.9721438	.9840863	.9912761	.9954091
27	.7671857	.8358262	.8891315	.9281806	.9553032	.9734261	.9848104	.9916669
28	.6963518	.7772832	.8433062	.8942687	.9315735	.9575203	.9746971	.9853357
29	.6179287	.7088826	.7870233	.8504659	.8992588	.9348789	.9566056	.9759526
30	.5349984	.6326411	.7209832	.7964256	.8573863	.9040956	.9380959	.9644100
31	.4511467	.5511855	.6468918	.7126780	.8055075	.8640772	.9087825	.9413230
32	.3699999	.4685006	.5673326	.6607049	.7439805	.8142848	.8705475	.9133828
33	.2947700	.3875058	.4854916	.5828591	.6741026	.7549340	.8227712	.8768051
34	.2278990	.3111887	.4047717	.5021300	.5999827	.6871045	.7655319	.8309791
35	.1708620	.2433928	.3283773	.4217967	.5184259	.6127201	.6997286	.7759796
36	.1241459	.1844919	.2589495	.3450338	.4385803	.5343887	.6270862	.7119911
37	.0873787	.1356289	.1983191	.2745493	.3615785	.4551249	.5500739	.6410949
38	.0555548	.0966528	.1474084	.2123197	.2901747	.3780033	.4714301	.5653521
39	.0329271	.0667415	.1062798	.1594610	.2304724	.3058105	.3943015	.4874969
40	.0209094	.0446449	.0742956	.1162404	.1717652	.2407577	.3214433	.4104676
41	.0155159	.0289234	.0503404	.0822041	.1265162	.1843011	.2551582	.3370413
42	.0092288	.0165154	.0305523	.0563771	.0904538	.1370900	.1970503	.2696581
43	.0053747	.0102224	.0210251	.0374851	.0627479	.0990121	.1479454	.2099950
44	.0030117	.0064827	.0129558	.0241582	.0422204	.0694456	.1079266	.1590668
45	.0016332	.0036914	.0077329	.0150885	.0275475	.0472857	.0764625	.1171251
46	.0008572	.0020351	.0044704	.0091317	.0174257	.0311944	.0525884	.0837911
47	.0004355	.0010663	.0022509	.0053547	.0106851	.0199715	.0351002	.0582151
48	.0002141	.0005614	.0013572	.0030420	.0061803	.0123986	.0227296	.0392551
49	.0001019	.0002809	.0007128	.0017743	.0036575	.0074627	.0142771	.0257030
50	.0000470	.0001361	.0003625	.0009927	.0020414	.0043543	.0086971	.0163251
51	.0000209	.0000630	.0001786	.0004611	.0011041	.0024627	.0051372	.0100584
52	.0000090	.0000290	.0000852	.0002307	.0005786	.0013492	.0029420	.0061017
53	.0000038	.0000120	.0000394	.0001118	.0002738	.0007172	.0016333	.0034832

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120

$n = 120$

	.25	.26	.27	.28	.29	.30	.31	.32
54	.0000015	.0000054	.0000176	.0000525	.0001445	.0003692	.0000790	.0019572
55	.0000006	.0000032	.0000076	.0000239	.0000689	.0001842	.0000458	.0010662
56	.0000002	.0000009	.0000033	.0000105	.0000318	.0000890	.0002317	.0005630
57	.0000001	.0000003	.0000013	.0000045	.0000142	.0000417	.0001348	.0003807
58		.0000001	.0000005	.0000019	.0000062	.0000189	.0000539	.0001229
59			.0000002	.0000007	.0000026	.0000083	.0000248	.0000687
60			.0000001	.0000003	.0000011	.0000035	.0000110	.0000320
61				.0000001	.0000004	.0000015	.0000048	.0000144
62					.0000002	.0000006	.0000020	.0000063
63							.0000007	.0000028
64							.0000003	.0000011
65							.0000001	.0000004
66								.0000002
67								.0000000
Nº	.33	.34	.35	.36	.37	.38	.39	.40
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
14	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
15	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
16	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
17	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
18	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
19	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000
20	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000
21	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000
22	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
23	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
24	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
25	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
26	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
27	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
28	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
29	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
30	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
31	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
32	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
33	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
34	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
35	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
36	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
37	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
38	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
39	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
40	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
41	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
42	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
43	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
44	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
45	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
46	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
47	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
48	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
49	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
50	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
51	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
52	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
53	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
54	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
55	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
56	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
57	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
58	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
59	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
60	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
61	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
62	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
63	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
64	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
65	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
66	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
67	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
68	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
69	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
70	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
71	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
72	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
73	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
74	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
75	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
76	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
77	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999

$$H(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

.0000001

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$$P(a, n, i) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 120

λ	.49	.50
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	1.00000000	1.00000000
19	1.00000000	1.00000000
20	1.00000000	1.00000000
21	1.00000000	1.00000000
22	1.00000000	1.00000000
23	1.00000000	1.00000000
24	1.00000000	1.00000000
25	1.00000000	1.00000000
26	1.00000000	1.00000000
27	1.00000000	1.00000000
28	1.00000000	1.00000000
29	1.00000000	1.00000000
30	1.00000000	1.00000000
31	.99999999	1.00000000
32	.99999998	.99999999
33	.99999995	.99999998
34	.99999987	.99999996
35	.99999968	.99999989
36	.99999922	.99999971
37	.99999818	.99999931
38	.99999591	.99999838
39	.99999114	.99999635
40	.99998152	.99999210
41	.99996379	.99998348
42	.99992768	.99996666
43	.99986423	.99993503
44	.99975366	.99987766
45	.99956773	.99977725
46	.99926605	.99960767
47	.99879346	.99933110
48	.99807855	.99895886
49	.99703395	.99823382
50	.99555920	.99728101
51	.99354719	.99507963
52	.99093991	.99304361
53	.98751127	.99146774
54	.98334147	.98823983
55	.97837073	.98483483
56	.97263975	.98042884
57	.96624859	.97505045
58	.95933395	.96878700
59	.95188865	.96178359
60	.94399399	.95363425
61	.93579789	.94436575
62	.92729184	.9341641
63	.91846054	.9241300
64	.90933720	.9141955
65	.9000646	.9057116
66	.8905500	.8976517
67	.8807996	.8896017
68	.8707991	.8813226
69	.86051439	.8728139
70	.8500296	.86412037
71	.8392900	.8553899
72	.8282737	.8466618
73	.8169745	.8379414
74	.8053480	.8292888
75	.7934063	.8206233
76	.7811977	.8122275
77	.7687589	.8041234
78	.7560977	.7964497
79	.7432148	.7893334
80	.7300701	.7828152
81	.7167383	.7769790
82	.7031913	.7718365
83	.6894961	.7674018
84	.6756985	.7636888
85	.6617910	.7607029
86	.6478004	.7584611
87	.6337501	.7568804
88	.6196802	.7559802
89	.6056201	.7557601

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$$f(x,y) = \sum_{n=0}^{\infty} \frac{(-1)^n}{n!} x^n y^n$$

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	.17	.18	.19	.20	.21	.22	.23	.24
18	.7675605	.8440033	.9014082	.9404656	.9656929	.9811308	.9900640	.9949937
19	.6845379	.7781522	.8516459	.9053608	.9426990	.9660178	.9816169	.9908766
20	.5923535	.6988382	.7882663	.8582857	.9095638	.9499483	.9799998	.9982012
21	.4960604	.6100450	.7124455	.7979417	.8646426	.9134898	.9472000	.9691957
22	.4018036	.5183020	.6289075	.7284213	.8078116	.8660153	.9073332	.9444430
23	.3124923	.4287667	.5370533	.6330118	.7178186	.7904751	.8510851	.9008490
24	.2350358	.3434893	.4436220	.5343319	.6084196	.6746820	.7326449	.7825503
25	.1699210	.2651729	.3542888	.4361046	.5022365	.5531045	.5991533	.6418645
26	.1181742	.1877037	.2515507	.3099919	.3633479	.4119469	.4560331	.4959441
27	.0790405	.1130195	.1506273	.1814274	.2059362	.2236103	.2338937	.2370964
28	.0508303	.0707838	.0907838	.1092474	.1257363	.1407402	.1537619	.1642000
29	.0314463	.0434688	.0554688	.0669362	.0773945	.0863443	.0933355	.0989757
30	.0187090	.0277463	.03690720	.04558193	.05322365	.0593443	.0633355	.0656449
31	.0107085	.0169988	.0228988	.02790376	.03250447	.03610130	.03898377	.0413494
32	.0058083	.0088983	.0119483	.0145483	.0167483	.0185483	.0199483	.0209483
33	.0031273	.0047273	.0062273	.0075273	.0086273	.0095273	.0102273	.0107273
34	.0015467	.0023467	.0031467	.0038467	.0044467	.0049467	.0053467	.0056467
35	.0007852	.0011852	.0015852	.0019852	.0023852	.0027852	.0031852	.0035852
36	.0003721	.0005721	.0007721	.0009721	.0011721	.0013721	.0015721	.0017721
37	.0001700	.0002700	.0003700	.0004700	.0005700	.0006700	.0007700	.0008700
38	.0000749	.0001149	.0001549	.0001949	.0002349	.0002749	.0003149	.0003549
39	.0000318	.0000458	.0000598	.0000738	.0000878	.0001018	.0001158	.0001298
40	.0000130	.0000190	.0000250	.0000310	.0000370	.0000430	.0000490	.0000550
41	.0000058	.0000083	.0000108	.0000133	.0000158	.0000183	.0000208	.0000233
42	.0000020	.0000027	.0000034	.0000041	.0000048	.0000055	.0000062	.0000069
43	.0000007	.0000009	.0000011	.0000013	.0000015	.0000017	.0000019	.0000021
44	.0000003	.0000004	.0000005	.0000006	.0000007	.0000008	.0000009	.0000010
45	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001
46	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
47	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
48	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
49	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
50	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
51	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
52	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
53	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
54	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
55	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
56	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
57	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
58	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
59	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
60	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
61	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
62	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
63	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
64	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
65	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
66	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
67	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
68	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
69	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
70	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
71	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
72	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
73	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
74	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
75	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
76	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
77	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
78	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
79	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
80	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
81	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
82	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
83	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
84	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
85	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
86	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
87	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
88	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
89	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
90	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
91	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
92	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
93	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
94	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
95	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
96	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
97	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
98	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
99	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
100	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000

	1.49	1.60
1	1,00000000	1,00000000
2	1,00000000	1,00000000
3	1,00000000	1,00000000
4	1,00000000	1,00000000
5	1,00000000	1,00000000
6	1,00000000	1,00000000

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$$P(o, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 121

xp	.49	.50
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	1.00000000	1.00000000
19	1.00000000	1.00000000
20	1.00000000	1.00000000
21	1.00000000	1.00000000
22	1.00000000	1.00000000
23	1.00000000	1.00000000
24	1.00000000	1.00000000
25	1.00000000	1.00000000
26	1.00000000	1.00000000
27	1.00000000	1.00000000
28	1.00000000	1.00000000
29	1.00000000	1.00000000
30	1.00000000	1.00000000
31	1.00000000	1.00000000
32	.99999999	1.00000000
33	.99999997	.99999999
34	.99999991	.99999997
35	.99999977	.99999992
36	.99999944	.99999980
37	.99999869	.99999951
38	.99999702	.99999844
39	.99999548	.99999737
40	.99999403	.99999623
41	.99999267	.99999511
42	.99999140	.99999403
43	.99999022	.99999300
44	.99998912	.99999202
45	.99998809	.99999109
46	.99998713	.99999022
47	.99998624	.99998940
48	.99998542	.99998863
49	.99998466	.99998791
50	.99998396	.99998724
51	.99998332	.99998662
52	.99998273	.99998604
53	.99998219	.99998550
54	.99998170	.99998500
55	.99998125	.99998454
56	.99998084	.99998412
57	.99998046	.99998373
58	.99998011	.99998337
59	.99997978	.99998303
60	.99997947	.99998271
61	.99997918	.99998241
62	.99997890	.99998212
63	.99997863	.99998184
64	.99997837	.99998157
65	.99997812	.99998131
66	.99997788	.99998106
67	.99997764	.99998082
68	.99997741	.99998058
69	.99997718	.99998035
70	.99997695	.99998012
71	.99997672	.99997990
72	.99997650	.99997968
73	.99997628	.99997946
74	.99997606	.99997924
75	.99997584	.99997902
76	.99997562	.99997880
77	.99997540	.99997858
78	.99997518	.99997836
79	.99997496	.99997814
80	.99997474	.99997792
81	.99997452	.99997770
82	.99997430	.99997748
83	.99997408	.99997726
84	.99997386	.99997704
85	.99997364	.99997682
86	.99997342	.99997660
87	.99997320	.99997638
88	.99997298	.99997616
89	.99997276	.99997594

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 122

	.01	.02	.03	.04	.05	.06	.07	.08
1	.70657773	.91496882	.97566995	.9931279	.99808845	.99947133	.9998571	.99996418
2	.31498166	.71496882	.82433005	.9068721	.95171550	.97337711	.98555551	.99355551
3	.12401330	.44185773	.71208883	.87013337	.94662210	.97955312	.99245713	.99742443
4	.03477311	.22847701	.4995803	.7233655	.8641703	.9390882	.9745650	.9900028
5	.0079014	.0989137	.3040510	.5414342	.7350699	.8622895	.9343094	.9708217
6	.0015057	.0365151	.1613347	.3625350	.5747136	.7466012	.8687660	.9314486
7	.0002459	.0116829	.0732616	.2171794	.4101374	.6026063	.7577713	.8468855
8	.0000350	.0032849	.0311506	.1168148	.2665973	.4502955	.6267021	.7484802
9	.0000044	.0008212	.0115385	.0567006	.1579978	.3105422	.4850667	.6482237
10	.0000005	.0001843	.0038554	.0249736	.0855582	.1975503	.3499546	.5157672
11	.0000001	.0000375	.0011703	.0100355	.0425394	.1160519	.2350366	.3956141
12		.0000069	.0003247	.0036982	.0194649	.0610857	.1469668	.2703800
13		.0000012	.0000828	.0012556	.0082313	.0318131	.0856489	.1776917
14		.0000002	.0000195	.0003284	.0032264	.0149229	.0465963	.1094929
15			.0000043	.0001151	.0011784	.0065291	.02377106	.0633210
16				.0000313	.0004015	.0026715	.0113081	.0344134
17			.0000009	.0000080	.0001281	.000748	.0037652	.0176030
18				.0000019	.0000384	.0003695	.0021358	.0084884
19				.0000004	.0000108	.0001255	.0006487	.0038651
20				.0000001	.0000029	.0000402	.0003187	.0016645
21					.0000007	.0000122	.0001133	.0006790
22					.0000002	.0000056	.0000382	.0002628
23						.0000010	.0000029	.0000166
24						.0000002	.0000007	.0000038
25						.0000001	.0000001	.0000013
26							.0000007	.0000036
27							.0000001	.0000011
28								.0000003
29								.0000001

	.09	.10	.11	.12	.13	.14	.15	.16
1	.9999899	.9999974	.9999993	.9999998	1.0000000	1.0000000	1.0000000	1.0000000
2	.9999884	.9999919	.9999982	.9999970	.9999992	.9999999	.9999999	1.0000000
3	.99991414	.99997236	.99999138	.99999739	.99999923	.99999978	.99999994	.99999996
4	.99962651	.99986642	.99995407	.99998477	.99999511	.99999848	.99999954	.99999987
5	.9874023	.9951625	.9981691	.9993356	.9997680	.9999218	.99999748	.99999920
6	.9680494	.9859803	.9941681	.9976876	.9991223	.9996800	.9998876	.9999619
7	.9299546	.9660855	.9845252	.9933054	.9972408	.9989123	.9995886	.9998503
8	.8675199	.9294538	.9647751	.9834029	.9925819	.9958413	.9987140	.9994980
9	.7787362	.8709448	.9296855	.9639918	.9825745	.9919948	.9944553	.9965333
10	.6675547	.7855988	.8747512	.9304635	.9636335	.9826013	.9915365	.9962059
11	.5432842	.6852088	.7980283	.8787993	.9316513	.9636180	.9816475	.9911964
12	.4181417	.5682424	.7014781	.8070673	.8829931	.9331475	.9638798	.9814809
13	.3036570	.4480269	.5910964	.7165873	.8157384	.8872647	.9348749	.9643632
14	.2078498	.3350038	.4756582	.6121870	.7307038	.8240629	.8915654	.9367742
15	.1340767	.2372298	.3645744	.5013465	.6377789	.7439583	.8320604	.8958599
16	.0815438	.1590106	.2657224	.3925214	.5253433	.6500682	.7564540	.8397489
17	.0467905	.1008894	.1740167	.2932802	.4189870	.5478533	.6672273	.7682742
18	.0253719	.0606224	.1210499	.2088987	.3198938	.4411009	.5698470	.6833854
19	.0130103	.0345235	.0756524	.1417771	.2351194	.3517760	.4877991	.6297850
20	.0063184	.0186504	.0449401	.0916767	.1628732	.2577840	.3803532	.5297850
21	.0029099	.0095675	.0253911	.0564926	.1085082	.1841816	.2816284	.3942586
22	.0012725	.0046656	.0136554	.0331888	.0690511	.1259844	.2055786	.3050108
23	.0005291	.0021632	.0069965	.0185999	.0419836	.0824902	.1429661	.2282972
24	.0002094	.0008572	.0034181	.0099503	.0243985	.0517057	.0967991	.1643949
25	.0000790	.0004036	.0015937	.0050850	.0135594	.0310335	.0622811	.1115524
26	.0000284	.0001624	.0007098	.0024842	.0072105	.0179418	.0384761	.0736347
27	.0000098	.0000625	.0003023	.0011611	.0036711	.0098300	.0228035	.0466896
28	.0000032	.0000230	.0001232	.0005196	.0019077	.0051527	.0125998	.0281210
29	.0000010	.0000081	.0000481	.0002228	.0008374	.0026314	.0070811	.0165477
30	.0000003	.0000027	.0000180	.0000916	.0003756	.0012799	.0037141	.0093665
31	.0000001	.0000009	.0000064	.0000361	.0001617	.0005978	.0018716	.0050671
32		.0000003	.0000022	.0000137	.0000669	.0002683	.0008067	.0022637
33		.0000001	.0000007	.0000050	.0000266	.0001158	.0004225	.0013203
34			.0000002	.0000017	.0000102	.0000481	.0001894	.0006364
35			.0000001	.0000006	.0000037	.0000192	.0000817	.0002954
36				.0000002	.0000013	.0000074	.0000340	.0001321
37				.0000001	.0000005	.0000027	.0000136	.0000569
38					.0000001	.0000003	.0000015	.0000077
39						.0000003	.0000020	.0000095
40						.0000001	.0000007	.0000037
41							.0000002	.0000014
42							.0000001	.0000005
43								.0000002
44								.0000001

	.17	.18	.19	.20	.21	.22	.23	.24
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	.9999996	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	.9999975	.9999993	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
6	.9999875	.9999960	.9999968	.9999996	.9999999	1.0000000	1.0000000	1.0000000
7	.9999475	.9999822	.9999942	.9999982	.9999994	.9999998	1.0000000	1.0000000
8	.9998116	.9999319	.9999763	.9999920	.9999974	.9999993	.9999997	.9999999
9	.99954116	.9997732	.9999152	.9999699	.9999896	.9999965	.9999989	.9999997
10	.9983738	.9993320	.9997363	.9999000	.9999634	.9999871	.9999956	.9999986
11	.9959720	.9982376	.9992610	.9997024	.9998848	.9999570	.9999846	.9999946
12	.9909630	.9957915	.9982522	.9991996	.9996719	.9999707	.9999509	.9999821
13	.9814731	.9908246	.9956710	.9980367	.9991484	.9996454	.9998280	.9999453
14	.9650263	.9815992	.9907700	.9955267	.9979710	.9992077	.9996232	.9998471
15	.9387991	.9650324	.9816377	.9907085	.9955341	.9979269	.9990778	.9996056
16	.9001220	.9469132	.9667520	.9821698	.99068702	.9955290	.9979029	.9990566

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

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n = 122

x	.17	.18	.19	.20	.21	.22	.23	.24
17	.0471448	.0433321	.040874	.0387603	.03695791	.03541061	.03408571	.03293973
18	.7794871	.6542627	.5084757	.4252935	.3688369	.3250518	.2911881	.2656142
19	.6986512	.7901494	.8611160	.9125418	.9475277	.9699645	.9830754	.9914087
20	.6080247	.7131147	.8003084	.8677168	.9165222	.9497596	.9711286	.9841393
21	.5124302	.6260279	.7268514	.8100045	.8740760	.9204106	.9519816	.9733171
22	.4173293	.5331758	.6431597	.7399254	.8192721	.8802037	.9242026	.9541837
23	.3279052	.4396031	.5530337	.6594937	.7523912	.8281408	.8861080	.9278946
24	.248274	.3602972	.4611170	.5520679	.6350934	.7042956	.7636364	.8117997
25	.1809905	.2694318	.3721807	.4819100	.5903350	.6900142	.7756794	.8447813
26	.1269712	.1994482	.2904024	.3935553	.5020145	.6078856	.7043048	.7865778
27	.0856932	.1420627	.2188367	.3111476	.4144251	.5214642	.6347647	.7180058
28	.0556327	.0983862	.1591496	.2378963	.3316401	.4347967	.5402899	.6410128
29	.0347410	.0652613	.1116473	.1757635	.2569765	.3518593	.4546780	.5585202
30	.0208743	.0416922	.0755301	.1254145	.1926438	.2760351	.3717898	.4740813
31	.0130686	.0256537	.0492671	.0863940	.1396305	.2097375	.2950367	.3914201
32	.0077140	.0152053	.0309845	.0574433	.0978006	.1542427	.2269975	.3139516
33	.0045984	.0086031	.0187891	.0368612	.0661941	.1097313	.1692029	.2443828
34	.0028569	.0047784	.0109872	.0228279	.0432744	.0754917	.1212111	.1844670
35	.0016922	.0028347	.0061968	.0136444	.0273268	.0502123	.0833081	.1249392
36	.0009443	.0012964	.0033715	.0078719	.0166672	.0322852	.0576607	.0956148
37	.0005204	.0006395	.0017700	.0043643	.0098193	.0200657	.0377032	.0636041
38	.0002910	.0003643	.0008960	.0023577	.0055890	.0120548	.0238471	.0435763
39	.0001591	.0001938	.0004386	.0011224	.0027073	.0057007	.0104592	.0201666
40	.0000862	.0000620	.0002072	.0006143	.0016331	.0039304	.0086330	.0174334
41	.0000453	.0000263	.0000945	.0002977	.0008307	.0021334	.0049414	.0104986
42	.0000225	.0000110	.0000416	.0001394	.0004163	.0011198	.0027360	.0061188
43	.0000109	.0000044	.0000177	.0000631	.0001998	.0005684	.0014655	.0034513
44	.0000053	.0000021	.0000073	.0000276	.0000927	.0002791	.0007595	.0018842
45	.0000021	.0000006	.0000029	.0000117	.0000416	.0001325	.0003809	.0009956
46	.0000002	.0000001	.0000001	.0000004	.0000018	.0000069	.0001840	.0005093
47	.0000001	.0000000	.0000000	.0000001	.0000006	.0000027	.0000088	.0002522
48	.0000000	.0000000	.0000000	.0000000	.0000003	.0000016	.0000065	.0001209
49	.0000000	.0000000	.0000000	.0000000	.0000001	.0000004	.0000017	.0000056
50	.0000000	.0000000	.0000000	.0000000	.0000000	.0000002	.0000007	.0000025
51	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000003	.0000010
52	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000001	.0000002
53	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000001
54	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
55	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
56	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000

x	.25	.26	.27	.28	.29	.30	.31	.32
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	.9999995	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	.9999982	.9999994	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
12	.9999977	.9999992	.9999995	.9999997	.9999999	1.0000000	1.0000000	1.0000000
13	.9999970	.9999987	.9999993	.9999996	.9999997	.9999999	1.0000000	1.0000000
14	.9999963	.9999975	.9999991	.9999992	.9999990	.9999997	.9999999	1.0000000
15	.9999958	.9999960	.9999975	.9999991	.9999996	.9999998	.9999996	.9999999
16	.9999925	.9999938	.9999932	.9999970	.9999990	.9999966	.9999988	.9999996
17	.9999905	.9999938	.9999925	.9999927	.9999972	.9999963	.9999987	.9999987
18	.9999707	.9999042	.9999579	.9999278	.9999278	.9999718	.9999894	.9999962
19	.9995664	.9997934	.9990477	.9995786	.9998208	.9999267	.9999712	.9999891
20	.9916613	.9958001	.9979717	.9990599	.9995816	.9998210	.9999264	.9999709
21	.9847344	.9919401	.9959219	.9980210	.9990783	.9995877	.9998228	.9999268
22	.9735195	.9853527	.9922396	.9960587	.9980749	.9991021	.9995968	.9998260
23	.9563572	.9747271	.9859871	.9925553	.9960766	.9981466	.9991305	.9996083
24	.9314843	.9584952	.9759323	.9866316	.9928828	.9963661	.9982197	.9991627
25	.8972841	.9349700	.9605920	.9771290	.9872809	.9932185	.9965318	.9982979
26	.8525958	.9025607	.9383506	.9626428	.9783116	.9879305	.9935590	.9967025
27	.7970219	.8600969	.9076602	.9416254	.9646417	.9794755	.9885763	.9939016
28	.7311565	.8070159	.8673003	.9125644	.9447944	.9665916	.9806168	.9892100
29	.6566549	.7437803	.8166530	.8742200	.9172869	.9478575	.9694839	.9817323
30	.5761818	.6717567	.7559336	.8258855	.8808685	.9218328	.9508151	.9703185
31	.4930149	.5932995	.6863142	.7676156	.8347557	.8872571	.9262069	.9536678
32	.4107423	.5114906	.6098960	.7003650	.7788588	.8432806	.8933958	.9304136
33	.3327447	.4297508	.5255194	.6239923	.7139327	.7850442	.8314756	.8652941
34	.2618469	.3514453	.4444422	.5411123	.6416080	.7350381	.8086108	.8593346
35	.1999951	.2793881	.3699456	.4668144	.5642798	.6567608	.7397036	.8101558
36	.1481490	.2157507	.2969484	.3881009	.4840667	.5810333	.6714673	.7519440
37	.1063841	.1617162	.2317008	.3145128	.4064789	.5025993	.5973797	.6857428
38	.0742827	.1158887	.1756087	.2478155	.3320597	.4244690	.5200129	.6133318
39	.0468006	.0729082	.1092023	.1597965	.2247670	.3049599	.3957999	.4917089
40	.0285770	.0566634	.0822337	.1211996	.1642519	.2043320	.2604320	.3270258
41	.0170590	.0375296	.0638615	.1019845	.1535561	.2189487	.2968866	.3844125
42	.0106642	.0240842	.0428739	.0714838	.1121426	.1662488	.2338630	.3134109
43	.0074740	.0149735	.0279033	.0486083	.0795201	.1225907	.1792556	.2489724
44	.0046897	.0090180	.0176017	.0320576	.0547301	.0879599	.1336114	.1925557
45	.0028840	.0052611	.0107608	.0205014	.0365501	.0612353	.0967923	.1448881
46	.0018229	.0029731	.0063750	.0127116	.0236791	.0413828	.0681197	.1060063
47	.0010685	.0016275	.0036598	.0074607	.0140790	.0271407	.0465565	.0753782
48	.0006373	.0008630	.0020358	.0044519	.0090668	.0172708	.0308912	.0530717
49	.0003448	.0004432	.0010973	.0023143	.0053574	.0106615	.0198942	.0349345
50	.0000780	.0002305	.0005731	.0013763	.0030693	.0063838	.0124327	.0237554
51	.0000358	.0001063	.0002900	.0007302	.0017048	.0037072	.0075385	.0143877
52	.0000159	.0000496	.0001422	.0003755	.0009180	.0020877	.0044342	.0088885

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$$P(c, n, p) = \sum_{k=0}^n \binom{n}{k} c^k (1-p)^{n-k}$$

n = 122

x	.25	.26	.27	.28	.29	.30	.31	.32
53	.0000068	.0000225	.0000676	.0001871	.0004792	.0011400	.0025299	.0052565
54	.0000028	.0000098	.0000311	.0000904	.0002425	.0006036	.0013994	.0030364
55	.0000011	.0000042	.0000139	.0000423	.0001189	.0003099	.0007513	.0017014
56	.0000004	.0000017	.0000060	.0000192	.0000565	.0001542	.0003939	.0009247
57	.0000002	.0000007	.0000025	.0000084	.0000261	.0000744	.0001972	.0004874
58	.0000001	.0000003	.0000010	.0000036	.0000116	.0000348	.0000965	.0002492
59		.0000001	.0000004	.0000015	.0000050	.0000158	.0000458	.0001235
60			.0000002	.0000006	.0000021	.0000069	.0000210	.0000593
61			.0000001	.0000002	.0000009	.0000030	.0000094	.0000276
62				.0000001	.0000003	.0000012	.0000040	.0000125
63					.0000001	.0000005	.0000017	.0000055
64						.0000002	.0000007	.0000023
65						.0000001	.0000003	.0000010
66							.0000001	.0000004
67								.0000001
68								.0000001
x	.33	.34	.35	.36	.37	.38	.39	.40
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
14	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
15	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
16	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
17	.9999996	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
18	.9999987	.9999995	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
19	.9999960	.9999986	.9999995	.9999998	1.0000000	1.0000000	1.0000000	1.0000000
20	.9999889	.9999959	.9999986	.9999995	.9999998	1.0000000	1.0000000	1.0000000
21	.9999709	.9999889	.9999959	.9999986	.9999995	.9999998	.9999999	1.0000000
22	.9999278	.9999712	.9999890	.9999959	.9999986	.9999995	.9999998	.9999999
23	.9998305	.9999295	.9999718	.9999872	.9999960	.9999986	.9999995	.9999998
24	.9996219	.9998360	.9999316	.9999725	.9999895	.9999961	.9999986	.9999995
25	.9991981	.9996372	.9998424	.9999342	.9999736	.9999898	.9999962	.9999987
26	.9983799	.9992359	.9996540	.9998495	.9999372	.9999748	.9999903	.9999964
27	.9968764	.9984646	.9992756	.9996718	.9998573	.9999404	.9999741	.9999908
28	.9942435	.9970519	.9985510	.9993164	.9996905	.9998654	.9999439	.9999775
29	.9898436	.9945827	.9972273	.9986382	.9993580	.9997096	.9998739	.9999475
30	.9828191	.9904595	.9949170	.9974015	.9987252	.9993999	.9997289	.9998825
31	.9720937	.9838750	.9910406	.9952450	.9975731	.9988115	.9994416	.9997483
32	.9564161	.9738084	.9848980	.9916450	.9953450	.9977413	.9988944	.9994877
33	.9344433	.9590611	.9754615	.9858665	.9922112	.9950759	.9979051	.9990753
34	.9049603	.9383418	.9616037	.9770525	.9868394	.9927579	.9961767	.9980639
35	.8669302	.9104022	.9420711	.9640480	.9785809	.9877555	.9932841	.9964665
36	.8198344	.8742137	.9156270	.9456486	.9663861	.9800466	.9886342	.9937889
37	.7657765	.8291609	.8812157	.9206411	.9490779	.9686285	.9814497	.9904750
38	.6994004	.7752156	.8381479	.8879455	.9354509	.9623623	.9707713	.9792994
39	.6288958	.7130537	.7862748	.8468071	.8944120	.9300618	.9555048	.9728221
40	.5538888	.6440816	.7261143	.7969664	.8551491	.9006231	.9344794	.9582687
41	.4772306	.5703546	.6588365	.7387928	.8073014	.8631836	.9065862	.9387085
42	.4017165	.4943934	.5865081	.6733476	.7490900	.8171900	.8701195	.9121018
43	.3299869	.4189254	.5113355	.6023513	.6874418	.7603426	.8269417	.8803651
44	.2642562	.3465953	.4360284	.5280528	.6178862	.7011850	.7746311	.8382650
45	.2061293	.2796950	.3632228	.4530155	.5445416	.6331145	.7145833	.7858724
46	.1565046	.2199577	.2952709	.3798542	.4698777	.5607987	.6480380	.7276411
47	.1155907	.1684451	.2340233	.3109672	.3964761	.4866066	.5768810	.6626882
48	.0830052	.1253346	.1806948	.2483094	.3267682	.4130764	.5031946	.5926018
49	.0579277	.0909948	.1358270	.1932190	.2628002	.3426594	.4296436	.5196345
50	.0392742	.0641235	.0993411	.1464573	.2060640	.2774808	.3586271	.4461669
51	.0258604	.0439130	.0706576	.1080378	.1574150	.2191865	.2923373	.3746503
52	.0165339	.0292144	.0488330	.0775282	.1170785	.1688899	.2325038	.3073562
53	.0108606	.0188757	.0328220	.0540960	.0847130	.1264570	.1802722	.2460940
54	.0061802	.0118414	.0214212	.0366876	.0596432	.0922697	.1361669	.1951824
55	.0036121	.0072111	.0135771	.0241753	.0408148	.0654957	.1001356	.1462032
56	.0020483	.0042620	.0083550	.0154736	.0271432	.0452072	.0716541	.1083280
57	.0011268	.0024443	.0049507	.0096174	.0175366	.0303298	.0498679	.0781139
58	.0006018	.0012601	.0024932	.0050832	.0100038	.0197716	.0337346	.0547592
59	.0003111	.0007341	.0014874	.0030937	.0060358	.0125494	.0241834	.0437371
60	.0001561	.0003643	.0008681	.0019516	.0039648	.0076978	.0141692	.0247778
61	.0000760	.0001951	.0004701	.0010651	.0022755	.0045949	.0087891	.0159583
62	.0000358	.0000961	.0002413	.0005697	.0012672	.0026620	.0052929	.0099822
63	.0000164	.0000458	.0001201	.0002955	.0006846	.0014464	.0030937	.0060624
64	.0000073	.0000212	.0000530	.0001287	.0003087	.0006410	.0013573	.0028371
65	.0000031	.0000095	.0000271	.0000725	.0001822	.0004316	.0009254	.0020441
66	.0000013	.0000041	.0000123	.0000343	.0000897	.0002213	.0005151	.0011348
67	.0000005	.0000017	.0000054	.0000157	.0000428	.0001100	.0002665	.0006104
68	.0000002	.0000007	.0000023	.0000070	.0000198	.0000530	.0001337	.0003194
69	.0000001	.0000003	.0000010	.0000030	.0000089	.0000248	.0000650	.0001610
70		.0000001	.0000004	.0000012	.0000039	.0000112	.0000306	.0000789
71			.0000001	.0000005	.0000016	.0000049	.0000140	.0000375
72			.0000001	.0000002	.0000007	.0000021	.0000062	.0000178
73				.0000001	.0000003	.0000009	.0000026	.0000077
74					.0000001	.0000003	.0000011	.0000033
75						.0000001	.0000004	.0000014
76							.0000002	.0000006
77							.0000001	.0000002
78								.0000001

n = 122

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

[illegible]

$$F(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

Φ	.49	.50
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	1.00000000	1.00000000
19	1.00000000	1.00000000
20	1.00000000	1.00000000
21	1.00000000	1.00000000
22	1.00000000	1.00000000
23	1.00000000	1.00000000
24	1.00000000	1.00000000
25	1.00000000	1.00000000
26	1.00000000	1.00000000
27	1.00000000	1.00000000
28	1.00000000	1.00000000
29	1.00000000	1.00000000
30	1.00000000	1.00000000
31	1.00000000	1.00000000
32	.99999999	1.00000000
33	.99999998	.99999999
34	.99999994	.99999998
35	.99999984	.99999995
36	.99999961	.99999986
37	.99999906	.99999965
38	.99999784	.99999918
39	.99999521	.99999810
40	.99998978	.99999560
41	.99997896	.99999101
42	.99995815	.99998143
43	.99991961	.99996296
44	.99985071	.99992860
45	.99973185	.99986690
46	.99953391	.99975996
47	.99921556	.99958094
48	.99872098	.99929148
49	.99797850	.99883918
50	.96901118	.98156113
51	.95389996	.97158887
52	.93340116	.95750997
53	.90655114	.93828865
54	.87238888	.91289973
55	.83049775	.88045555
56	.7807358	.84034559
57	.7235342	.7923574
58	.6598981	.7367918
59	.5913786	.6745201
60	.5199670	.6069711
61	.4479254	.5360446
62	.3775742	.4639554
63	.3110721	.3930289
64	.2502205	.3254799
65	.1963229	.2632082
66	.1501156	.2076426
67	.1117743	.1596541
68	.0809845	.1195444
69	.0570576	.0871027
70	.0390666	.0617135
71	.0259789	.0424903
72	.0167695	.0284113
73	.0105020	.0184387
74	.0063776	.0114082
75	.0037536	.0070852
76	.0021401	.0041906
77	.0011814	.0024004
78	.0006312	.0013310
79	.0003262	.0007140
80	.0001630	.0003704
81	.0000787	.0001857
82	.0000367	.0000899
83	.0000165	.0000420
84	.0000072	.0000190
85	.0000030	.0000082
86	.0000012	.0000035
87	.0000005	.0000014
88	.0000002	.0000005
89	.0000001	.0000002
90		.0000001

$$F(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 12*

	.01	.02	.03	.04	.05	.06	.07	.08
1	.7095115	.9166689	.9763994	.9934028	.9981803	.9995049	.9998671	.9999649
2	.3486016	.7074907	.8866197	.9595920	.9864000	.9956175	.9986371	.9995889
3	.1268237	.4470852	.7172416	.8736563	.9485792	.9804816	.9928894	.9975948
4	.0356239	.2327379	.5059555	.7292363	.8682928	.9415148	.9758441	.9906011
5	.0081627	.1015048	.3099168	.5487114	.7415249	.8668974	.9371287	.9723566
6	.0015696	.0377630	.1656162	.3696909	.5827314	.7535425	.8677741	.9345985
7	.0002585	.0121794	.0778458	.2229936	.4183662	.6112460	.7651093	.8700265
8	.0000371	.0034529	.0324740	.1208194	.2737743	.4594341	.6350505	.7761767
9	.0000047	.0008705	.0121268	.0591052	.1634278	.3189274	.4949868	.6578442
10	.0000005	.0001971	.0040859	.0262427	.0892162	.2043298	.3594124	.5263637
11	.0000001	.0000404	.0012508	.0106131	.0446924	.1209417	.2430808	.3960265
12		.0000076	.0003501	.0039517	.0206186	.0662636	.1531314	.2795988
13		.0000013	.0000901	.0013533	.0087929	.0336895	.0899411	.1451067
14		.0000002	.0000024	.0000289	.0034786	.0159363	.0493300	.1149488
15			.0000017	.0001263	.0012809	.0070327	.0253126	.0670147
16			.0000010	.0000347	.0004404	.0029030	.0121763	.0367250
17			.0000002	.0000089	.0001418	.0011236	.0055022	.0189478
18				.0000021	.0000428	.0004088	.0023403	.0092176
19				.0000005	.0000122	.0001401	.0009388	.0042349
20				.0000001	.0000033	.0000453	.0003558	.0018405
21					.0000008	.0000139	.0001277	.0007578
22					.0000002	.0000040	.0000434	.0002961
23						.0000011	.0000140	.0001099
24						.0000003	.0000043	.0000388
25						.0000001	.0000013	.0000131
26							.0000004	.0000042
27							.0000001	.0000013
28								.0000004
29								.0000001
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AMCP 706-109

$$I(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 123

	.17	.18	.19	.20	.21	.22	.23	.24
17	.8561309	.9109167	.9475837	.9706422	.9843203	.9920011	.9960966	.9981754
18	.7909889	.8632752	.9150519	.9497909	.9717228	.9848017	.9921929	.9961681
19	.7183933	.8016898	.8701143	.9190331	.9520086	.9728437	.9853263	.9924180
20	.6234312	.7259609	.8118619	.8766816	.9230333	.9542046	.9739914	.9858640
21	.5286813	.6417035	.7408083	.8215470	.8829897	.9268674	.9563855	.9751344
22	.4334984	.5498892	.6520611	.7339412	.7907609	.8307609	.8595918	.8805918
23	.3431073	.4564468	.5592577	.6408766	.7007609	.7407609	.7695918	.7905918
24	.2611098	.3693723	.4675819	.5505530	.613259	.6603415	.6940151	.7184885
25	.1924283	.2839876	.3690787	.4408416	.4981343	.5438561	.5806998	.6106599
26	.1361545	.2123732	.2789403	.338263	.3855618	.4259538	.4627805	.4968467
27	.0927105	.1531201	.2082432	.2604292	.3018189	.3340479	.3605088	.3824631
28	.0607430	.1061920	.1474902	.1861900	.2224558	.2573116	.2828953	.3004911
29	.0388942	.0712338	.1024797	.1324500	.1611537	.1885164	.2145952	.2394467
30	.0232320	.0459346	.0683924	.0904643	.1121537	.1335164	.1545952	.1754467
31	.0135656	.0285406	.0442571	.0604198	.0769333	.0937530	.1108330	.1281280
32	.0076260	.0170860	.0344582	.0532774	.0734512	.0949712	.1178330	.1419880
33	.0041284	.0099571	.0211062	.0408766	.0634311	.0897609	.1198957	.1548957
34	.0021529	.0054812	.0124696	.0285416	.0480875	.0730244	.1043952	.1432467
35	.0010819	.0029386	.0071070	.0154811	.0306753	.0530244	.0837751	.1230289
36	.0005241	.0015193	.0039083	.0090264	.0189056	.0362292	.0640196	.1050527
37	.0002448	.0007578	.0020743	.0050818	.0112577	.0227540	.0428934	.0738067
38	.0001103	.0003447	.0009627	.0024631	.0061775	.0138172	.0270430	.0488300
39	.0000480	.0001694	.0005527	.0014511	.0036017	.0088126	.0176185	.0317909
40	.0000201	.0000760	.0002511	.0007363	.0019356	.0046058	.0100030	.0199733
41	.0000082	.0000329	.0001159	.0003610	.0009055	.0022588	.0057905	.0121630
42	.0000032	.0000138	.0000517	.0001711	.0004388	.0010432	.0026432	.0061699
43	.0000012	.0000056	.0000233	.0000784	.0002083	.0005177	.0012757	.0031815
44	.0000004	.0000028	.0000113	.0000397	.0001152	.0003427	.0008219	.0020208
45	.0000002	.0000008	.0000037	.0000149	.0000523	.0001648	.0004680	.0012089
46	.0000001	.0000003	.0000015	.0000062	.0000230	.0000767	.0002299	.0006860
47		.0000001	.0000005	.0000025	.0000098	.0000345	.0001094	.0003159
48			.0000002	.0000010	.0000040	.0000150	.0000484	.0001510
49			.0000001	.0000004	.0000016	.0000063	.0000224	.0000717
50			.0000001	.0000001	.0000006	.0000026	.0000097	.0000326
51					.0000002	.0000010	.0000041	.0000144
52					.0000001	.0000004	.0000015	.0000068
53						.0000001	.0000005	.0000025
54							.0000008	.0000035
55							.0000001	.0000004
56								.0000000
57								.0000000

	.25	.26	.27	.28	.29	.30	.31	.32
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	.99999996	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	.99999995	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	.99999995	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	.99999994	.99999998	.99999999	.99999999	.99999999	1.00000000	1.00000000	1.00000000
13	.99999993	.99999997	.99999999	.99999999	.99999999	.99999999	1.00000000	1.00000000
14	.99999991	.99999995	.99999999	.99999999	.99999999	.99999999	.99999999	1.00000000
15	.99999986	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
16	.99999982	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
17	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
18	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
19	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
20	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
21	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
22	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
23	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
24	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
25	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
26	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
27	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
28	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
29	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
30	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
31	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
32	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
33	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
34	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
35	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
36	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
37	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
38	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
39	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
40	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
41	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
42	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
43	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
44	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
45	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
46	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
47	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
48	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
49	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
50	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
51	.99999981	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999

$$F(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 123

	.25	.26	.27	.28	.29	.30	.31	.32
52	.00000209	.00000444	.0001821	.0004748	.0011462	.0025735	.0053965	.0106074
53	.00000091	.00000255	.0000877	.0002339	.0006064	.0014243	.0031202	.0063995
54	.00000036	.00000131	.0000410	.0001175	.0003111	.0007645	.0017502	.0037468
55	.00000014	.00000057	.0000185	.0000558	.0001548	.0003980	.00094523	.0021288
56	.00000006	.00000024	.0000081	.0000257	.0000746	.0002009	.0005026	.0011733
57	.00000002	.00000010	.0000035	.0000114	.0000349	.0000983	.0002573	.0006374
58	.00000001	.00000004	.0000014	.0000050	.0000158	.0000467	.0001277	.0003254
59		.00000001	.0000006	.0000021	.0000070	.0000215	.0000545	.0001437
60		.00000001	.0000002	.0000008	.0000030	.0000096	.0000247	.0000799
61			.0000001	.0000003	.0000012	.0000041	.0000130	.0000378
62				.0000001	.0000005	.0000017	.0000057	.0000173
63					.0000002	.0000007	.0000024	.0000077
64					.0000001	.0000003	.0000010	.0000033
65						.0000001	.0000004	.0000014
66							.0000002	.0000006
67							.0000001	.0000003
68								.0000001
	.33	.34	.35	.36	.37	.38	.39	.40
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
14	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
15	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
16	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
17	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
18	.99999990	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
19	.99999982	.99999993	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
20	.99999973	.99999989	.99999999	.99999999	.99999999	1.00000000	1.00000000	1.00000000
21	.99999964	.99999981	.99999998	.99999999	.99999999	.99999999	1.00000000	1.00000000
22	.99999955	.99999972	.99999996	.99999999	.99999999	.99999999	.99999999	1.00000000
23	.99999946	.99999963	.99999994	.99999999	.99999999	.99999999	.99999999	.99999999
24	.99999937	.99999954	.99999993	.99999999	.99999999	.99999999	.99999999	.99999999
25	.99999928	.99999945	.99999984	.99999999	.99999999	.99999999	.99999999	.99999999
26	.99999919	.99999936	.99999975	.99999999	.99999999	.99999999	.99999999	.99999999
27	.99999910	.99999927	.99999966	.99999999	.99999999	.99999999	.99999999	.99999999
28	.99999901	.99999918	.99999957	.99999999	.99999999	.99999999	.99999999	.99999999
29	.99999892	.99999909	.99999948	.99999999	.99999999	.99999999	.99999999	.99999999
30	.99999883	.99999900	.99999939	.99999999	.99999999	.99999999	.99999999	.99999999
31	.99999874	.99999891	.99999930	.99999999	.99999999	.99999999	.99999999	.99999999
32	.99999865	.99999882	.99999921	.99999999	.99999999	.99999999	.99999999	.99999999
33	.99999856	.99999873	.99999912	.99999999	.99999999	.99999999	.99999999	.99999999
34	.99999847	.99999864	.99999903	.99999999	.99999999	.99999999	.99999999	.99999999
35	.99999838	.99999855	.99999894	.99999999	.99999999	.99999999	.99999999	.99999999
36	.99999829	.99999846	.99999885	.99999999	.99999999	.99999999	.99999999	.99999999
37	.99999820	.99999837	.99999876	.99999999	.99999999	.99999999	.99999999	.99999999
38	.99999811	.99999828	.99999867	.99999999	.99999999	.99999999	.99999999	.99999999
39	.99999802	.99999819	.99999858	.99999999	.99999999	.99999999	.99999999	.99999999
40	.99999793	.99999810	.99999849	.99999999	.99999999	.99999999	.99999999	.99999999
41	.99999784	.99999801	.99999840	.99999999	.99999999	.99999999	.99999999	.99999999
42	.99999775	.99999792	.99999831	.99999999	.99999999	.99999999	.99999999	.99999999
43	.99999766	.99999783	.99999822	.99999999	.99999999	.99999999	.99999999	.99999999
44	.99999757	.99999774	.99999813	.99999999	.99999999	.99999999	.99999999	.99999999
45	.99999748	.99999765	.99999804	.99999999	.99999999	.99999999	.99999999	.99999999
46	.99999739	.99999756	.99999795	.99999999	.99999999	.99999999	.99999999	.99999999
47	.99999730	.99999747	.99999786	.99999999	.99999999	.99999999	.99999999	.99999999
48	.99999721	.99999738	.99999777	.99999999	.99999999	.99999999	.99999999	.99999999
49	.99999712	.99999729	.99999768	.99999999	.99999999	.99999999	.99999999	.99999999
50	.99999703	.99999720	.99999759	.99999999	.99999999	.99999999	.99999999	.99999999
51	.99999694	.99999711	.99999750	.99999999	.99999999	.99999999	.99999999	.99999999
52	.99999685	.99999702	.99999741	.99999999	.99999999	.99999999	.99999999	.99999999
53	.99999676	.99999693	.99999732	.99999999	.99999999	.99999999	.99999999	.99999999
54	.99999667	.99999684	.99999723	.99999999	.99999999	.99999999	.99999999	.99999999
55	.99999658	.99999675	.99999714	.99999999	.99999999	.99999999	.99999999	.99999999
56	.99999649	.99999666	.99999705	.99999999	.99999999	.99999999	.99999999	.99999999
57	.99999640	.99999657	.99999696	.99999999	.99999999	.99999999	.99999999	.99999999
58	.99999631	.99999648	.99999687	.99999999	.99999999	.99999999	.99999999	.99999999
59	.99999622	.99999639	.99999678	.99999999	.99999999	.99999999	.99999999	.99999999
60	.99999613	.99999630	.99999669	.99999999	.99999999	.99999999	.99999999	.99999999
61	.99999604	.99999621	.99999660	.99999999	.99999999	.99999999	.99999999	.99999999
62	.99999595	.99999612	.99999651	.99999999	.99999999	.99999999	.99999999	.99999999
63	.99999586	.99999603	.99999642	.99999999	.99999999	.99999999	.99999999	.99999999
64	.99999577	.99999594	.99999633	.99999999	.99999999	.99999999	.99999999	.99999999
65	.99999568	.99999585	.99999624	.99999999	.99999999	.99999999	.99999999	.99999999
66	.99999559	.99999576	.99999615	.99999999	.99999999	.99999999	.99999999	.99999999
67	.99999550	.99999567	.99999606	.99999999	.99999999	.99999999	.99999999	.99999999
68	.99999541	.99999558	.99999597	.99999999	.99999999	.99999999	.99999999	.99999999
69	.99999532	.99999549	.99999588	.99999999	.99999999	.99999999	.99999999	.99999999
70	.99999523	.99999540	.99999579	.99999999	.99999999	.99999999	.99999999	.99999999
71	.99999514	.99999531	.99999570	.99999999	.99999999	.99999999	.99999999	.99999999
72	.99999505	.99999522	.99999561	.99999999	.99999999	.99999999	.99999999	.99999999
73	.99999496	.99999513	.99999552	.99999999	.99999999	.99999999	.99999999	.99999999
74	.99999487	.99999504	.99999543	.99999999	.99999999	.99999999	.99999999	.99999999
75	.99999478	.99999495	.99999534	.99999999	.99999999	.99999999	.99999999	.99999999
76	.99999469	.99999486	.99999525	.99999999	.99999999	.99999999	.99999999	.99999999
77	.99999460	.99999477	.99999516	.99999999	.99999999	.99999999	.99999999	.99999999
78	.99999451	.99999468	.99999507	.99999999	.99999999	.99999999	.99999999	.99999999
79	.99999442	.99999459	.99999498	.99999999	.99999999	.99999999	.99999999	.99999999

$$F(n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 123

	.41	.42	.43	.44	.45	.46	.47	.48
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
14	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
15	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
16	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
17	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
18	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
19	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
20	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
21	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
22	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
23	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
24	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
25	.99999997	.99999997	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
26	.99999991	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
27	.99999975	.99999991	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
28	.99999935	.99999976	.99999992	.99999997	.99999999	1.00000000	1.00000000	1.00000000
29	.99999841	.99999940	.99999978	.99999992	.99999998	.99999999	1.00000000	1.00000000
30	.99999626	.99999853	.99999945	.99999994	.99999998	.99999999	.99999999	1.00000000
31	.99999158	.99999657	.99999866	.99999950	.99999982	.99999994	.99999998	.99999999
32	.99998182	.99999229	.99999687	.99999878	.99999955	.99999984	.99999994	.99999998
33	.99996230	.99998140	.99999299	.99999716	.99999890	.99999959	.99999986	.99999995
34	.99992497	.99996563	.99998402	.99999366	.99999745	.99999902	.99999964	.99999987
35	.99985625	.99993158	.99995879	.99998637	.99999430	.99999772	.99999913	.99999987
36	.99973482	.99984887	.99993787	.99997180	.99998775	.99999491	.99999797	.99999923
37	.99952355	.99975788	.99980035	.99984303	.99987465	.99989905	.99991548	.99992821
38	.99910151	.99956889	.99977967	.99989215	.99994945	.99997732	.99999027	.99999601
39	.99856145	.99925917	.99960700	.99980025	.99990378	.99995471	.99997981	.99999140
40	.99785864	.99877035	.99932305	.99964288	.99981956	.99991270	.99995961	.99998213
41	.99687077	.99802700	.99873223	.99938322	.99967657	.99983761	.99992198	.99996415
42	.99503894	.99691731	.99818626	.99870511	.99939774	.99970809	.99985141	.99991027
43	.99280206	.99519671	.99737447	.99833667	.99906142	.99949267	.99973748	.99987004
44	.98987877	.99389521	.99573666	.99739091	.99847034	.99914701	.99954811	.99976479
45	.98617744	.99052835	.99378454	.99589229	.99761096	.99861163	.99922712	.99958615
46	.98166561	.98701094	.99152274	.99421148	.99636509	.99781099	.99873472	.99930191
47	.97634917	.98269195	.98781178	.99174064	.99463662	.99655451	.99799933	.99885387
48	.97029653	.97756812	.98360265	.98858069	.99231974	.99504054	.99692801	.99787632
49	.96363690	.97169337	.97875065	.98463834	.98911832	.99286366	.99542379	.99718605
50	.95655342	.96518195	.97305579	.97989718	.98559600	.99022536	.99368206	.99578692
51	.94926824	.95880351	.96697754	.97438390	.9800812	.98444693	.98702339	.98878550
52	.94021800	.95097027	.95963105	.96818339	.97567777	.98208380	.98730100	.99135000
53	.93049355	.94171785	.95266041	.96133777	.96833920	.97373748	.97819455	.98182815
54	.92055852	.93282248	.94411299	.95433761	.96302060	.97064711	.97816305	.98413068
55	.91071148	.92307840	.93485539	.94510595	.95400877	.96157968	.96879589	.97554553
56	.90011401	.91307883	.92516819	.93597761	.94492545	.95264923	.96011437	.96732356
57	.88911264	.90280335	.91547305	.92677659	.93633601	.94460042	.95258171	.96024092
58	.87799914	.89249914	.90525545	.91682545	.92680229	.93530229	.94351955	.95155955
59	.86670080	.88190080	.89548834	.90789554	.91874255	.92854419	.93789552	.94751175
60	.85533773	.87120059	.88548859	.89878833	.91089546	.92254414	.93459597	.94754635
61	.84391706	.86040079	.87533225	.88934416	.90232552	.91500667	.92829200	.94251150
62	.83245549	.84955556	.86496222	.87933807	.89270510	.90606050	.91980628	.93451675
63	.82095914	.83864073	.85457777	.86944044	.88372557	.89793370	.91351188	.92980083
64	.80943704	.82764971	.84414809	.85944423	.87413344	.88984594	.90700009	.92513627
65	.79788335	.81667715	.83375516	.85000854	.86619546	.88309546	.90129536	.92050078
66	.78629722	.80560081	.8234403	.84129735	.85952223	.87869545	.89924977	.9216603
67	.77467514	.79454466	.8128369	.83125352	.85019107	.86995651	.89126774	.9145309
68	.76302665	.78340350	.80220700	.82107743	.84054370	.86122779	.88351191	.90783883
69	.75135172	.77221318	.79195510	.81223510	.83354318	.85639582	.88129105	.90853697
70	.73965684	.7610104	.78123173	.80277013	.82527719	.84939553	.87564331	.9045134
71	.72793150	.74973192	.7707157	.79243240	.81530861	.84009591	.86749676	.9012783
72	.71618658	.7384658	.7598161	.78183343	.80501543	.83009543	.85767774	.90122203
73	.70443111	.7271794	.7481924	.7704423	.79439662	.82069866	.84997889	.90127197
74	.692680142	.7159378	.7365951	.7592272	.78439157	.81269853	.84488853	.90124870
75	.68093063	.7046874	.7259456	.75001131	.77609666	.80599777	.84049577	.90125555
76	.66918027	.6934378	.7152211	.7390546	.7655335	.7953108	.8292689	.90124548
77	.65743011	.6821933	.7045095	.7300254	.7583667	.7901565	.8269960	.90127897
78	.64568004	.6709414	.6938041	.72000115	.74903303	.7815761	.8191623	.90124150
79	.63393003	.6596006	.6830007	.70950050	.739800138	.7745359	.8135893	.90121111
80	.62218001	.6483002	.67220017	.70000021	.73000060	.7645360	.8044423	.9012038
81	.61043000	.6370001	.6615003	.68800009	.71800009	.75300072	.794000193	.90120494
82	.59868000	.62560001	.65050003	.67800003	.70900003	.74500011	.78700006	.90120087
83	.58693000	.6143000	.64050001	.67000001	.70200002	.73900003	.78200003	.90120101
84	.57518000	.6030000	.62950001	.66000001	.69400002	.73300003	.77800003	.90120043
85	.56343000	.5915000	.61850001	.65000001	.68600002	.72700003	.77400003	.90120018
86	.55168000	.5799000	.60750001	.64000001	.67800002	.71900003	.76800003	.90120007
87	.53993000	.5683000	.59650001	.63000001	.66900002	.71200003	.76300003	.90120003
88	.52818000	.5567000	.58500001	.61500001	.65600002	.70000003	.75300003	.90120001

	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000

$$P(o, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 123

x	.49	.50
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	1.00000000	1.00000000
19	1.00000000	1.00000000
20	1.00000000	1.00000000
21	1.00000000	1.00000000
22	1.00000000	1.00000000
23	1.00000000	1.00000000
24	1.00000000	1.00000000
25	1.00000000	1.00000000
26	1.00000000	1.00000000
27	1.00000000	1.00000000
28	1.00000000	1.00000000
29	1.00000000	1.00000000
30	1.00000000	1.00000000
31	1.00000000	1.00000000
32	.99999999	1.00000000
33	.99999998	1.00000000
34	.99999996	.99999999
35	.99999989	.99999996
36	.99999972	.99999980
37	.99999933	.99999974
38	.99999844	.99999942
39	.99999650	.99999844
40	.99999244	.99999695
41	.99998426	.99999340
42	.99996815	.99998432
43	.99993850	.99997280
44	.99988447	.99994578
45	.99979009	.99989775
46	.99963090	.99981343
47	.99937115	.99967045
48	.99896330	.99936821
49	.99814231	.99865333
50	.97429006	.98449765
51	.96130444	.97661750
52	.94344556	.96454982
53	.91388766	.94789981
54	.86910889	.92858919
55	.81102442	.89666764
56	.80511190	.86040007
57	.75156659	.81603514
58	.69107988	.76457746
59	.62495531	.70565560
60	.5549587	.64074556
61	.4832258	.5715078
62	.4180463	.50000000
63	.3436582	.42849999
64	.2800378	.35925544
65	.2227587	.29434440
66	.1727572	.23542554
67	.1305615	.1836484
68	.0960718	.1395993
69	.0687818	.1033336
70	.0478828	.0744081
71	.0323919	.0521019
72	.0218881	.0354500
73	.0135731	.0234280
74	.0083984	.0150833
75	.0050393	.0091447
76	.0029307	.0054379
77	.0016518	.0031995
78	.0009008	.0018657
79	.0004754	.0010925
80	.0002429	.0005422
81	.0001260	.0002780
82	.0000573	.0001378
83	.0000264	.0000660
84	.0000117	.0000305
85	.0000050	.0000136
86	.0000021	.0000058
87	.0000008	.0000024
88	.0000003	.0000010
89	.0000001	.0000004
90	.0000001	.0000001

AMCP 706-109

$$P(n, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 124

	.01	.02	.03	.04	.05	.06	.07	.08
1	.7124164	.9183155	.9771074	.9936647	.9988713	.9995346	.9998764	.9999477
2	.3582107	.7116743	.8893131	.9609444	.9869890	.9958307	.9987832	.9996190
3	.1384465	.4533933	.7223230	.8770936	.9504702	.9813288	.9933048	.9977444
4	.0365299	.2370248	.5122941	.7350131	.8723071	.9438598	.9770448	.9911606
5	.0084443	.1041295	.3157980	.5559324	.7478633	.8713745	.9398388	.9738168
6	.0016356	.0390379	.1699453	.3768518	.5906711	.7603438	.8726889	.9376191
7	.0002716	.0126913	.0804789	.2208615	.4265845	.6197030	.7722959	.8781923
8	.0000394	.0036974	.0318351	.1249159	.2810039	.4685428	.6449914	.7834847
9	.0000050	.0009221	.0127372	.0615741	.1689451	.3273878	.5048543	.6673108
10	.0000006	.0002105	.0043371	.0273572	.0929286	.2112086	.3689026	.5368821
11	.0000001	.0000435	.0013359	.0112575	.0449187	.1259450	.2512240	.4044535
12		.0000008	.0003771	.0042189	.0318223	.0695443	.1304879	.24889130
13		.0000014	.0000979	.0014573	.0093842	.0356439	.0943644	.1986461
14		.0000002	.0000035	.0000459	.0037443	.0170015	.0581728	.1208614
15			.0000005	.0000138	.0013908	.0075669	.0269939	.0708495
16			.0000011	.0000383	.0004824	.0031507	.0130958	.0391491
17			.0000002	.0000099	.0001567	.00018304	.0052493	.0203701
18				.0000024	.0000478	.00004517	.0085616	.0099960
19				.0000006	.0000137	.00001562	.0010369	.0046335
20				.00000001	.0000037	.00000510	.0000366	.0000381
21					.0000010	.00000158	.00001436	.00008445
22					.0000002	.00000046	.00000493	.00003330
23					.00000001	.00000011	.00000161	.00001248
24						.00000003	.00000050	.00000445
25						.00000001	.00000015	.00000181
26							.00000004	.00000049
27							.00000001	.00000015
28								.00000004
29								.00000001
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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 124

	.17	.18	.19	.20	.21	.22	.23	.24
17	.6447437	.9171234	.9517703	.9732923	.9859014	.9930933	.9965748	.99844165
18	.8030665	.8718506	.9212330	.9539612	.9743682	.9863866	.9930700	.9966453
19	.7257546	.8127731	.8786585	.9252327	.9561439	.9754744	.9869056	.9933166
20	.6385340	.7404885	.8229298	.8851640	.92891149	.9583052	.9765984	.9874521
21	.5447888	.6570534	.7543085	.8325739	.8913989	.9320816	.9564348	.9777225
22	.4496778	.5664157	.6745931	.7674684	.8417448	.8973692	.9365843	.9625242
23	.3584734	.4732659	.5870493	.6912593	.7799464	.8504746	.9030863	.9400436
24	.2756299	.3825856	.4959813	.6067584	.7070991	.7918172	.8587918	.9085605
25	.2042230	.2988169	.4060843	.5178635	.6256045	.7281989	.8031121	.8667211
26	.1457210	.2252638	.3217366	.4289694	.5399520	.6436423	.7358556	.8138713
27	.1000960	.1637856	.2464004	.3443486	.4512449	.5592618	.6609810	.7503238
28	.0661775	.1148030	.1822595	.2675631	.3666217	.4729185	.5786778	.6774844
29	.0421108	.0775541	.1301380	.2010613	.2866934	.3855383	.4939998	.5977999
30	.0257986	.0504867	.0896656	.1460234	.2201101	.3097420	.4100627	.5144999
31	.0158089	.0316715	.0594028	.1024553	.1623953	.2393695	.3306677	.4311999
32	.0096357	.0191479	.0348200	.0642824	.1158674	.1791833	.2587565	.3514356
33	.0047230	.0091158	.0174431	.0345428	.0642823	.11290479	.1963304	.2789308
34	.0024888	.0048260	.00914105	.01827032	.03532841	.0710543	.1245454	.2137824
35	.0012864	.0025363	.00481359	.0095118	.01843319	.03617669	.07027853	.12593109
36	.00064109	.0012748	.0025161	.00513173	.01033772	.02045990	.04086634	.07507295
37	.0003293	.0006494	.00128297	.00258707	.00512838	.010257185	.02042905	.04085457
38	.0001633	.0003254	.00064354	.00128661	.002578113	.00512838	.010257185	.02042905
39	.0000856	.0001690	.0003380	.0006760	.0013513	.0027026	.0054052	.0108104
40	.0000428	.0000856	.0001712	.0003424	.0006846	.0013692	.0027384	.0054768
41	.0000214	.0000428	.0000856	.0001712	.0003424	.0006846	.0013692	.0027384
42	.0000107	.0000214	.0000428	.0000856	.0001712	.0003424	.0006846	.0013692
43	.0000054	.0000107	.0000214	.0000428	.0000856	.0001712	.0003424	.0006846
44	.0000027	.0000054	.0000107	.0000214	.0000428	.0000856	.0001712	.0003424
45	.0000014	.0000027	.0000054	.0000107	.0000214	.0000428	.0000856	.0001712
46	.0000007	.0000014	.0000027	.0000054	.0000107	.0000214	.0000428	.0000856
47	.0000004	.0000007	.0000014	.0000027	.0000054	.0000107	.0000214	.0000428
48	.0000002	.0000004	.0000007	.0000014	.0000027	.0000054	.0000107	.0000214
49	.0000001	.0000002	.0000004	.0000007	.0000014	.0000027	.0000054	.0000107
50	.0000001	.0000001	.0000002	.0000004	.0000007	.0000014	.0000027	.0000054
51	.0000001	.0000001	.0000001	.0000002	.0000004	.0000007	.0000014	.0000027
52	.0000001	.0000001	.0000001	.0000001	.0000002	.0000004	.0000007	.0000014
53	.0000001	.0000001	.0000001	.0000001	.0000001	.0000002	.0000004	.0000007
54	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000002	.0000004
55	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000002
56	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001
57	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001

	.25	.26	.27	.28	.29	.30	.31	.32
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
10	.9999997	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
11	.9999996	.9999998	.9999998	.9999998	.9999998	.9999998	.9999998	.9999998
12	.9999994	.9999996	.9999996	.9999996	.9999996	.9999996	.9999996	.9999996
13	.9999991	.9999993	.9999993	.9999993	.9999993	.9999993	.9999993	.9999993
14	.9999988	.9999989	.9999989	.9999989	.9999989	.9999989	.9999989	.9999989
15	.9999985	.9999986	.9999986	.9999986	.9999986	.9999986	.9999986	.9999986
16	.9999981	.9999982	.9999982	.9999982	.9999982	.9999982	.9999982	.9999982
17	.9999977	.9999978	.9999978	.9999978	.9999978	.9999978	.9999978	.9999978
18	.9999973	.9999974	.9999974	.9999974	.9999974	.9999974	.9999974	.9999974
19	.9999969	.9999970	.9999970	.9999970	.9999970	.9999970	.9999970	.9999970
20	.9999965	.9999966	.9999966	.9999966	.9999966	.9999966	.9999966	.9999966
21	.9999961	.9999962	.9999962	.9999962	.9999962	.9999962	.9999962	.9999962
22	.9999957	.9999958	.9999958	.9999958	.9999958	.9999958	.9999958	.9999958
23	.9999953	.9999954	.9999954	.9999954	.9999954	.9999954	.9999954	.9999954
24	.9999949	.9999950	.9999950	.9999950	.9999950	.9999950	.9999950	.9999950
25	.9999945	.9999946	.9999946	.9999946	.9999946	.9999946	.9999946	.9999946
26	.9999941	.9999942	.9999942	.9999942	.9999942	.9999942	.9999942	.9999942
27	.9999937	.9999938	.9999938	.9999938	.9999938	.9999938	.9999938	.9999938
28	.9999933	.9999934	.9999934	.9999934	.9999934	.9999934	.9999934	.9999934
29	.9999929	.9999930	.9999930	.9999930	.9999930	.9999930	.9999930	.9999930
30	.9999925	.9999926	.9999926	.9999926	.9999926	.9999926	.9999926	.9999926
31	.9999921	.9999922	.9999922	.9999922	.9999922	.9999922	.9999922	.9999922
32	.9999917	.9999918	.9999918	.9999918	.9999918	.9999918	.9999918	.9999918
33	.9999913	.9999914	.9999914	.9999914	.9999914	.9999914	.9999914	.9999914
34	.9999909	.9999910	.9999910	.9999910	.9999910	.9999910	.9999910	.9999910
35	.9999905	.9999906	.9999906	.9999906	.9999906	.9999906	.9999906	.9999906
36	.9999901	.9999902	.9999902	.9999902	.9999902	.9999902	.9999902	.9999902
37	.9999897	.9999898	.9999898	.9999898	.9999898	.9999898	.9999898	.9999898
38	.9999893	.9999894	.9999894	.9999894	.9999894	.9999894	.9999894	.9999894
39	.9999889	.9999890	.9999890	.9999890	.9999890	.9999890	.9999890	.9999890
40	.9999885	.9999886	.9999886	.9999886	.9999886	.9999886	.9999886	.9999886
41	.9999881	.9999882	.9999882	.9999882	.9999882	.9999882	.9999882	.9999882
42	.9999877	.9999878	.9999878	.9999878	.9999878	.9999878	.9999878	.9999878
43	.9999873	.9999874	.9999874	.9999874	.9999874	.9999874	.9999874	.9999874
44	.9999869	.9999870	.9999870	.9999870	.9999870	.9999870	.9999870	.9999870
45	.9999865	.9999866	.9999866	.9999866	.9999866	.9999866	.9999866	.9999866
46	.9999861	.9999862	.9999862	.9999862	.9999862	.9999862	.9999862	.9999862
47	.9999857	.9999858	.9999858	.9999858	.9999858	.9999858	.9999858	.9999858
48	.9999853	.9999854	.9999854	.9999854	.9999854	.9999854	.9999854	.9999854
49	.9999849	.9999850	.9999850	.9999850	.9999850	.9999850	.9999850	.9999850
50	.9999845	.9999846	.9999846	.9999846	.9999846	.9999846	.9999846	.9999846
51	.9999841	.9999842	.9999842	.9999842	.9999842	.9999842	.9999842	.9999842
52	.9999837	.9999838	.9999838	.9999838	.9999838	.9999838	.9999838	.9999838
53	.9999833	.9999834	.9999834	.9999834	.9999834	.9999834	.9999834	.9999834
54	.9999829	.9999830	.9999830	.9999830	.9999830	.9999830	.9999830	.9999830
55	.9999825	.9999826	.9999826	.9999826	.9999826	.9999826	.9999826	.9999826
56	.9999821	.9999822	.9999822	.9999822	.9999822	.9999822	.9999822	.9999822
57	.9999817	.9999818	.9999818	.9999818	.9999818	.9999818	.9999818	.9999818

AMCP 706-109

$$h(e, n, r) = \sum_{r=0}^n \binom{n}{r} r^e (1-r)^{n-r}$$

n = 124

	.25	.26	.27	.28	.29	.30	.31	.33
52	.00000312	.00000038	.00000319	.00000570	.00149229	.0031545	.00065309	.01287401
53	.00000170	.00000166	.00001152	.00003056	.0007630	.0017691	.00036359	.0077461
54	.00000058	.00000174	.00000536	.00001317	.00003948	.00009625	.0001749	.0045957
55	.00000071	.00000076	.00000846	.00000730	.00002801	.00005079	.0001997	.0026465
56	.00000009	.00000032	.00000109	.00000341	.00000979	.00002600	.00006430	.0014790
57	.00000003	.00000013	.00000047	.00000154	.00000464	.00001691	.00003333	.00008021
58	.00000001	.00000005	.00000020	.00000068	.00000214	.00000822	.00001679	.00004820
59		.00000007	.00000009	.00000029	.00000395	.00000290	.00000820	.00002154
60		.00000001	.00000003	.00000018	.00000041	.00000138	.00000389	.00001067
61			.00000001	.00000005	.00000017	.00000058	.00000179	.00000513
62				.00000002	.00000007	.00000025	.00000080	.00000208
63				.00000001	.00000003	.00000010	.00000034	.00000106
64					.00000001	.00000004	.00000014	.00000047
65						.00000002	.00000006	.00000020
66						.00000001	.00000002	.00000003
67							.00000001	.00000003
68								.00000001
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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

-419-

AMCP 706-109

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 124

	.41	.42	.43	.44	.45	.46	.47	.48
81		.00000001	.00000005	.00000014	.00000041	.0000114	.0000301	.0000755
82		.00000001	.00000002	.00000006	.00000017	.0000050	.0000136	.0000355
83			.00000001	.00000002	.00000007	.0000021	.0000060	.0000161
84				.00000001	.00000003	.0000008	.0000025	.0000071
85					.00000001	.00000003	.0000010	.0000030
86						.00000001	.00000004	.0000012
87							.00000003	.0000005
88							.00000001	.0000002
89								.0000001

	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	1.00000000	1.00000000
19	1.00000000	1.00000000
20	1.00000000	1.00000000
21	1.00000000	1.00000000
22	1.00000000	1.00000000
23	1.00000000	1.00000000
24	1.00000000	1.00000000
25	1.00000000	1.00000000
26	1.00000000	1.00000000
27	1.00000000	1.00000000
28	1.00000000	1.00000000
29	1.00000000	1.00000000
30	1.00000000	1.00000000
31	1.00000000	1.00000000
32	1.00000000	1.00000000
33	.99999999	1.00000000
34	.99999997	.99999999
35	.99999992	.99999997
36	.99999990	.99999993
37	.99999982	.99999983
38	.99999987	.99999989
39	.999999745	.999999903
40	.99999943	.999999779
41	.99999827	.999999513
42	.999997615	.999998981
43	.999995312	.999997921
44	.999991094	.999995899
45	.999983633	.999992176
46	.99970890	.99985559
47	.99949863	.99974194
48	.99916335	.99953333
49	.99864661	.99925077
50	.9987656	.99878149
51	.99676677	.99807758
52	.99521965	.99705621
53	.99333290	.99562236
54	.99040924	.99367450
55	.9896857	.9911342
56	.98276126	.98785366
57	.97778054	.98383762
58	.97207165	.97904631
59	.96573552	.97351153
60	.9592560	.96732008
61	.95183749	.96061267
62	.94469243	.95357539
63	.93771603	.9462461
64	.93131118	.9387333
65	.92508122	.93167992
66	.9172452	.92448847
67	.9112374	.91695369
68	.90497716	.9092330
69	.89821537	.9014614
70	.8911230	.8938658
71	.88399821	.88638550
72	.87672259	.8787764
73	.86933505	.8710379
74	.8619341	.8632848
75	.85466854	.8554851
76	.84739640	.8474923
77	.84022782	.8394667
78	.83312655	.8313806
79	.82608040	.8234441
80	.81903570	.8157824
81	.81200180	.8084101
82	.80508803	.8012079
83	.8000415	.80001019
84	.80000189	.80000482
85	.80000083	.80000231

AMCP 706-109

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 124

$\frac{c}{n}$	.49	.50
86	.00000035	.00000097
87	.00000014	.00000041
88	.00000006	.00000017
89	.00000002	.00000007
90	.00000001	.00000003
91		.00000001

AMCP 706-109

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 125

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.7152922	.9199668	.9777942	.9939200	.9983577	.9995625	.9998851	.9999703
2	.3550127	.7158075	.8919469	.9622533	.9875651	.9960718	.9988039	.9994469
3	.1306441	.4574810	.7273327	.8804476	.9522962	.9822574	.9937866	.9979035
4	.0374491	.2413302	.5185950	.7406963	.8762153	.9461050	.9781881	.9916881
5	.0087251	.1067874	.3216929	.5630956	.7540855	.8757232	.9424432	.9752037
6	.0017037	.0403397	.1743208	.3840150	.5985307	.7678057	.8773336	.9405149
7	.0002853	.0132182	.0831629	.2347811	.4347888	.6282174	.7793192	.8801864
8	.0000417	.0038087	.0352344	.1290733	.2882829	.4776173	.6539029	.7910053
9	.0000054	.0009762	.0133702	.0641070	.1745480	.3358289	.5146639	.6766207
10	.0000006	.0002248	.0045794	.0289179	.0967295	.2181748	.3784192	.5473161
11	.0000001	.0000469	.0014256	.0119094	.0492192	.1310606	.2594615	.4168878
12		.0000089	.0004089	.0045005	.0230771	.0729284	.1558536	.2983162
13		.0000016	.0001062	.0015677	.0100061	.0376779	.0989189	.2003659
14		.0000003	.0000257	.0005056	.0040263	.0181200	.0551262	.1263298
15			.0000058	.0001515	.0015084	.0081330	.0287564	.0748264
16			.0000012	.0000423	.0005278	.0034157	.0140687	.0416851
17			.0000002	.0000111	.0001710	.0013456	.0064682	.0218724
18				.0000027	.0000532	.0004984	.0028602	.0108359
19				.0000006	.0000154	.0001740	.0011436	.0050625
20				.0000001	.0000042	.0000573	.0004415	.0022402
21					.0000011	.0000179	.0001613	.0009395
22					.0000003	.0000053	.0000559	.0003739
23					.0000001	.0000015	.0000184	.0001415
24						.0000004	.0000058	.0000309
25						.0000001	.0000017	.0000175
26							.0000005	.0000057
27							.0000001	.0000018
28								.0000005
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$$F(c, r, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 125

r	.17	.18	.19	.20	.21	.22	.23	.24
17	.8729324	.9229670	.9556638	.9757264	.9873356	.9936923	.9969964	.99866107
18	.8127216	.8799997	.9270350	.9578274	.9767902	.9878173	.9938920	.9970700
19	.7387276	.8234067	.8867428	.9309784	.9599710	.9778749	.9883282	.9941155
20	.6533787	.7534509	.8335171	.8931778	.9347925	.9620825	.9786691	.9885594
21	.5607280	.6720610	.7673465	.8430920	.8993197	.9384748	.9641524	.9800629
22	.4658467	.5827305	.6897390	.7854447	.8521721	.9051819	.9420237	.9617335
23	.3739782	.4900329	.6036826	.7064943	.7929258	.8607914	.9107770	.9454380
24	.2897133	.3989080	.5132842	.6236572	.7223975	.8047219	.8680795	.9161164
25	.2163622	.3138952	.4231647	.5354428	.6427184	.7375102	.8159184	.8767625
26	.1556663	.2485034	.3377627	.4467483	.5571491	.6609235	.7518867	.8265552
27	.1078522	.1748517	.2607143	.3612727	.4696634	.5778411	.6793230	.7655747
28	.0719436	.1236199	.1944463	.2822202	.3843926	.4919184	.5977550	.6949657
29	.0462019	.0842589	.1400411	.2143617	.3050583	.4070973	.5135239	.6169941
30	.0285666	.0553588	.0973554	.1570326	.2345197	.3270759	.4293682	.5344910
31	.0170081	.0350583	.0653147	.1111693	.1745173	.2548815	.3489286	.4511919
32	.0097531	.0214021	.0422127	.0760351	.1256382	.1924243	.2752961	.3700790
33	.0053881	.0125964	.0264127	.0502283	.0874708	.1407017	.2106884	.2950000
34	.0028686	.0071490	.0159217	.0320483	.0588781	.0995889	.1563020	.2292502
35	.0014722	.0039133	.0092630	.0197500	.0383119	.0682117	.1132441	.1723841
36	.0007286	.0020667	.0052019	.0117562	.0240977	.0452018	.0782054	.1256941
37	.0003478	.0010532	.0028205	.0067600	.0146518	.0284768	.0527122	.0888335
38	.0001602	.0005181	.0014768	.0037556	.0086117	.0179690	.0343954	.0608742
39	.0000712	.0002461	.0007469	.0020162	.0046935	.0107791	.0217252	.0403582
40	.0000306	.0001129	.0003649	.0010461	.0026887	.0062552	.0132825	.0259334
41	.0000127	.0000500	.0001723	.0005247	.0014286	.0035119	.0078606	.0161405
42	.0000051	.0000214	.0000787	.0002545	.0007342	.0019077	.0045031	.0097289
43	.0000020	.0000089	.0000347	.0001193	.0003650	.0010028	.0024972	.0056794
44	.0000007	.0000036	.0000148	.0000541	.0001756	.0005102	.0013408	.0032111
45	.0000003	.0000014	.0000061	.0000236	.0000817	.0002512	.0006970	.0017585
46	.0000001	.0000005	.0000024	.0000101	.0000368	.0001194	.0003508	.0009328
47		.0000002	.0000009	.0000041	.0000161	.0000553	.0001710	.0004793
48		.0000001	.0000004	.0000017	.0000068	.0000247	.0000868	.0002368
49			.0000006	.0000028	.0000102	.0000369	.0001307	.0003369
50			.0000002	.0000011	.0000045	.0000164	.0000605	.0002538
51			.0000001	.0000004	.0000018	.0000070	.0000243	.0000941
52				.0000002	.0000010	.0000042	.0000157	.0000610
53				.0000001	.0000005	.0000023	.0000092	.0000368
54					.0000001	.0000006	.0000028	.0000119
55						.0000002	.0000010	.0000041
56							.0000001	.0000003
57								.0000001

r	.25	.26	.27	.28	.29	.30	.31	.32
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
10	.9999998	.9999998	.9999998	.9999998	.9999998	.9999998	.9999998	.9999998
11	.9999990	.9999990	.9999990	.9999990	.9999990	.9999990	.9999990	.9999990
12	.9999985	.9999985	.9999985	.9999985	.9999985	.9999985	.9999985	.9999985
13	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980
14	.9999975	.9999975	.9999975	.9999975	.9999975	.9999975	.9999975	.9999975
15	.9999970	.9999970	.9999970	.9999970	.9999970	.9999970	.9999970	.9999970
16	.9999965	.9999965	.9999965	.9999965	.9999965	.9999965	.9999965	.9999965
17	.9999960	.9999960	.9999960	.9999960	.9999960	.9999960	.9999960	.9999960
18	.9999955	.9999955	.9999955	.9999955	.9999955	.9999955	.9999955	.9999955
19	.9999950	.9999950	.9999950	.9999950	.9999950	.9999950	.9999950	.9999950
20	.9999945	.9999945	.9999945	.9999945	.9999945	.9999945	.9999945	.9999945
21	.9999940	.9999940	.9999940	.9999940	.9999940	.9999940	.9999940	.9999940
22	.9999935	.9999935	.9999935	.9999935	.9999935	.9999935	.9999935	.9999935
23	.9999930	.9999930	.9999930	.9999930	.9999930	.9999930	.9999930	.9999930
24	.9999925	.9999925	.9999925	.9999925	.9999925	.9999925	.9999925	.9999925
25	.9999920	.9999920	.9999920	.9999920	.9999920	.9999920	.9999920	.9999920
26	.9999915	.9999915	.9999915	.9999915	.9999915	.9999915	.9999915	.9999915
27	.9999910	.9999910	.9999910	.9999910	.9999910	.9999910	.9999910	.9999910
28	.9999905	.9999905	.9999905	.9999905	.9999905	.9999905	.9999905	.9999905
29	.9999900	.9999900	.9999900	.9999900	.9999900	.9999900	.9999900	.9999900
30	.9999895	.9999895	.9999895	.9999895	.9999895	.9999895	.9999895	.9999895
31	.9999890	.9999890	.9999890	.9999890	.9999890	.9999890	.9999890	.9999890
32	.9999885	.9999885	.9999885	.9999885	.9999885	.9999885	.9999885	.9999885
33	.9999880	.9999880	.9999880	.9999880	.9999880	.9999880	.9999880	.9999880
34	.9999875	.9999875	.9999875	.9999875	.9999875	.9999875	.9999875	.9999875
35	.9999870	.9999870	.9999870	.9999870	.9999870	.9999870	.9999870	.9999870
36	.9999865	.9999865	.9999865	.9999865	.9999865	.9999865	.9999865	.9999865
37	.9999860	.9999860	.9999860	.9999860	.9999860	.9999860	.9999860	.9999860
38	.9999855	.9999855	.9999855	.9999855	.9999855	.9999855	.9999855	.9999855
39	.9999850	.9999850	.9999850	.9999850	.9999850	.9999850	.9999850	.9999850
40	.9999845	.9999845	.9999845	.9999845	.9999845	.9999845	.9999845	.9999845
41	.9999840	.9999840	.9999840	.9999840	.9999840	.9999840	.9999840	.9999840
42	.9999835	.9999835	.9999835	.9999835	.9999835	.9999835	.9999835	.9999835
43	.9999830	.9999830	.9999830	.9999830	.9999830	.9999830	.9999830	.9999830
44	.9999825	.9999825	.9999825	.9999825	.9999825	.9999825	.9999825	.9999825
45	.9999820	.9999820	.9999820	.9999820	.9999820	.9999820	.9999820	.9999820
46	.9999815	.9999815	.9999815	.9999815	.9999815	.9999815	.9999815	.9999815
47	.9999810	.9999810	.9999810	.9999810	.9999810	.9999810	.9999810	.9999810
48	.9999805	.9999805	.9999805	.9999805	.9999805	.9999805	.9999805	.9999805
49	.9999800	.9999800	.9999800	.9999800	.9999800	.9999800	.9999800	.9999800
50	.9999795	.9999795	.9999795	.9999795	.9999795	.9999795	.9999795	.9999795
51	.9999790	.9999790	.9999790	.9999790	.9999790	.9999790	.9999790	.9999790

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$$P(c, n, F) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 125

Φ	.25	.26	.27	.28	.29	.30	.31	.32
52	.0000353	.0001054	.0002916	.0007464	.0017567	.0039453	.0078604	.0150610
53	.0000158	.0000501	.0001453	.0003072	.0006954	.0012447	.0021444	.0032330
54	.0000069	.0000223	.0000697	.0001948	.0005010	.0012043	.0022687	.0035608
55	.0000029	.0000101	.0000324	.0000951	.0002571	.0006441	.0015020	.0032702
56	.0000012	.0000044	.0000146	.0000450	.0001275	.0003344	.0008149	.0018526
57	.0000005	.0000018	.0000064	.0000207	.0000613	.0001604	.0004290	.0010167
58	.0000002	.0000007	.0000027	.0000092	.0000286	.0000823	.0002192	.0005436
59	.0000001	.0000003	.0000011	.0000040	.0000130	.0000396	.0001084	.0002816
60		.0000001	.0000004	.0000017	.0000057	.0000179	.0000522	.0001415
61			.0000002	.0000007	.0000024	.0000080	.0000244	.0000690
62			.0000001	.0000003	.0000010	.0000035	.0000110	.0000326
63				.0000001	.0000004	.0000014	.0000040	.0000150
64					.0000002	.0000006	.0000021	.0000069
65					.0000001	.0000002	.0000009	.0000029
66						.0000001	.0000003	.0000012
67							.0000001	.0000005
68								.0000002
69								.0000001

Φ	.33	.34	.35	.36	.37	.38	.39	.40
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
14	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
15	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
16	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
17	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
18	.9999994	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
19	.9999981	.9999994	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
20	.9999946	.9999981	.9999994	.9999998	.9999999	1.0000000	1.0000000	1.0000000
21	.9999954	.9999947	.9999981	.9999994	.9999998	.9999999	1.0000000	1.0000000
22	.9999962	.9999958	.9999948	.9999982	.9999994	.9999998	.9999999	1.0000000
23	.9999970	.9999964	.9999983	.9999995	.9999998	.9999999	.9999999	.9999999
24	.9999979	.9999985	.9999996	.9999997	.9999998	.9999999	.9999999	.9999999
25	.9999981	.9999992	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
26	.9999987	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
27	.9999991	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
28	.9999994	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
29	.9999996	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
30	.9999997	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
31	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
32	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
33	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
34	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
35	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
36	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
37	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
38	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
39	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
40	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
41	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
42	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
43	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
44	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
45	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
46	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
47	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
48	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
49	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
50	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
51	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
52	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
53	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
54	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
55	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
56	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
57	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
58	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
59	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
60	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
61	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
62	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
63	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
64	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
65	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
66	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
67	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
68	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
69	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
70	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999

$$I(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 125

	.33	.34	.35	.36	.37	.38	.39	.40
71	.00000000	.00000002	.00000005	.00000018	.00000054	.00000156	.00000425	.00010889
72	.00000001	.00000002	.00000007	.00000023	.00000070	.00000198	.00000529	.00013529
73	.00000000	.00000001	.00000003	.00000010	.00000030	.00000090	.00000249	.00000649
74	.00000000	.00000000	.00000001	.00000004	.00000013	.00000039	.00000114	.00000314
75	.00000000	.00000000	.00000000	.00000002	.00000008	.00000021	.00000050	.00000125
76					.00000001	.00000002	.00000007	.00000022
77						.00000001	.00000003	.00000009
78							.00000001	.00000004
79								.00000001
80								.00000001

	.41	.42	.43	.44	.45	.46	.47	.48
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
14	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
15	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
16	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
17	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
18	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
19	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
20	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
21	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
22	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
23	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
24	.99999998	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
25	.99999998	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
26	.99999995	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
27	.99999994	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
28	.99999994	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
29	.99999994	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
30	.99999982	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
31	.99999949	.99999982	.99999995	.99999973	.99999941	.99999997	.99999999	1.00000000
32	.99999897	.99999954	.99999982	.99999933	.99999976	.99999992	.99999997	.99999999
33	.99999767	.99999805	.99999954	.99999941	.99999976	.99999992	.99999997	.99999999
34	.99999637	.99999775	.99999924	.99999911	.99999946	.99999981	.99999996	.99999999
35	.99999507	.99999645	.99999894	.99999881	.99999916	.99999951	.99999986	.99999999
36	.99999377	.99999515	.99999764	.99999751	.99999786	.99999821	.99999856	.99999889
37	.99999247	.99999385	.99999634	.99999621	.99999656	.99999691	.99999726	.99999759
38	.99999117	.99999255	.99999504	.99999491	.99999526	.99999561	.99999596	.99999629
39	.99998987	.99999125	.99999374	.99999361	.99999396	.99999431	.99999466	.99999499
40	.99998857	.99998995	.99999244	.99999231	.99999266	.99999301	.99999336	.99999369
41	.99998727	.99998865	.99999114	.99999101	.99999136	.99999171	.99999206	.99999239
42	.99998597	.99998735	.99998984	.99998971	.99999006	.99999041	.99999076	.99999109
43	.99998467	.99998605	.99998854	.99998841	.99998876	.99998911	.99998946	.99998979
44	.99998337	.99998475	.99998724	.99998711	.99998746	.99998781	.99998816	.99998849
45	.99998207	.99998345	.99998594	.99998581	.99998616	.99998651	.99998686	.99998719
46	.99998077	.99998215	.99998464	.99998451	.99998486	.99998521	.99998556	.99998589
47	.99997947	.99998085	.99998334	.99998321	.99998356	.99998391	.99998426	.99998459
48	.99997817	.99997955	.99998204	.99998191	.99998226	.99998261	.99998296	.99998329
49	.99997687	.99997825	.99998074	.99998061	.99998096	.99998131	.99998166	.99998199
50	.99997557	.99997695	.99997944	.99997931	.99997966	.99998001	.99998036	.99998069
51	.99997427	.99997565	.99997814	.99997801	.99997836	.99997871	.99997906	.99997939
52	.99997297	.99997435	.99997684	.99997671	.99997706	.99997741	.99997776	.99997809
53	.99997167	.99997305	.99997554	.99997541	.99997576	.99997611	.99997646	.99997679
54	.99997037	.99997175	.99997424	.99997411	.99997446	.99997481	.99997516	.99997549
55	.99996907	.99997045	.99997294	.99997281	.99997316	.99997351	.99997386	.99997419
56	.99996777	.99996915	.99997164	.99997151	.99997186	.99997221	.99997256	.99997289
57	.99996647	.99996785	.99997034	.99997021	.99997056	.99997091	.99997126	.99997159
58	.99996517	.99996655	.99996904	.99996891	.99996926	.99996961	.99996996	.99997029
59	.99996387	.99996525	.99996774	.99996761	.99996796	.99996831	.99996866	.99996899
60	.99996257	.99996395	.99996644	.99996631	.99996666	.99996701	.99996736	.99996769
61	.99996127	.99996265	.99996514	.99996501	.99996536	.99996571	.99996606	.99996639
62	.99995997	.99996135	.99996384	.99996371	.99996406	.99996441	.99996476	.99996509
63	.99995867	.99996005	.99996254	.99996241	.99996276	.99996311	.99996346	.99996379
64	.99995737	.99995875	.99996124	.99996111	.99996146	.99996181	.99996216	.99996249
65	.99995607	.99995745	.99995994	.99995981	.99996016	.99996051	.99996086	.99996119
66	.99995477	.99995615	.99995864	.99995851	.99995886	.99995921	.99995956	.99995989
67	.99995347	.99995485	.99995734	.99995721	.99995756	.99995791	.99995826	.99995859
68	.99995217	.99995355	.99995604	.99995591	.99995626	.99995661	.99995696	.99995729
69	.99995087	.99995225	.99995474	.99995461	.99995496	.99995531	.99995566	.99995599
70	.99994957	.99995095	.99995344	.99995331	.99995366	.99995401	.99995436	.99995469
71	.99994827	.99994965	.99995214	.99995201	.99995236	.99995271	.99995306	.99995339
72	.99994697	.99994835	.99995084	.99995071	.99995106	.99995141	.99995176	.99995209
73	.99994567	.99994705	.99994954	.99994941	.99994976	.99995011	.99995046	.99995079
74	.99994437	.99994575	.99994824	.99994811	.99994846	.99994881	.99994916	.99994949
75	.99994307	.99994445	.99994694	.99994681	.99994716	.99994751	.99994786	.99994819
76	.99994177	.99994315	.99994564	.99994551	.99994586	.99994621	.99994656	.99994689
77	.99994047	.99994185	.99994434	.99994421	.99994456	.99994491	.99994526	.99994559
78	.99993917	.99994055	.99994304	.99994291	.99994326	.99994361	.99994396	.99994429
79	.99993787	.99993925	.99994174	.99994161	.99994196	.99994231	.99994266	.99994299
80	.99993657	.99993795	.99994044	.99994031	.99994066	.99994101	.99994136	.99994169
81	.99993527	.99993665	.99993914	.99993901	.99993936	.99993971	.99994006	.99994039
82	.99993397	.99993535	.99993784	.99993771	.99993806	.99993841	.99993876	.99993909
83	.99993267	.99993405	.99993654	.99993641	.99993676	.99993711	.99993746	.99993779

AMCP 706-109

$$P(c,n,p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 125

X	.41	.42	.43	.44	.45	.46	.47	.48
84				.00000001	.00000005	.00000014	.00000041	.00001114
85				.00000001	.00000002	.00000006	.00000017	.00000049
86					.00000001	.00000003	.00000007	.00000021
87						.00000001	.00000003	.00000008
88							.00000001	.00000003
89								.00000001
X	.49	.50						
1	1.00000000	1.00000000						
2	1.00000000	1.00000000						
3	1.00000000	1.00000000						
4	1.00000000	1.00000000						
5	1.00000000	1.00000000						
6	1.00000000	1.00000000						
7	1.00000000	1.00000000						
8	1.00000000	1.00000000						
9	1.00000000	1.00000000						
10	1.00000000	1.00000000						
11	1.00000000	1.00000000						
12	1.00000000	1.00000000						
13	1.00000000	1.00000000						
14	1.00000000	1.00000000						
15	1.00000000	1.00000000						
16	1.00000000	1.00000000						
17	1.00000000	1.00000000						
18	1.00000000	1.00000000						
19	1.00000000	1.00000000						
20	1.00000000	1.00000000						
21	1.00000000	1.00000000						
22	1.00000000	1.00000000						
23	1.00000000	1.00000000						
24	1.00000000	1.00000000						
25	1.00000000	1.00000000						
26	1.00000000	1.00000000						
27	1.00000000	1.00000000						
28	1.00000000	1.00000000						
29	1.00000000	1.00000000						
30	1.00000000	1.00000000						
31	1.00000000	1.00000000						
32	1.00000000	1.00000000						
33	.99999999	1.00000000						
34	.99999998	.99999999						
35	.99999995	.99999999						
36	.99999986	.99999995						
37	.99999966	.99999989						
38	.99999919	.99999971						
39	.99999815	.99999931						
40	.99999591	.99999841						
41	.99999129	.99999649						
42	.99998209	.99999249						
43	.99996440	.99998451						
44	.99993161	.99996910						
45	.99987289	.99990338						
46	.99977134	.99988868						
47	.99963166	.99979876						
48	.99932764	.99964763						
49	.99889981	.99940205						
50	.99835388	.99901613						
51	.97310557	.98429553						
52	.95977774	.97566899						
53	.94155441	.96339288						
54	.91743883	.94648843						
55	.88654550	.92393966						
56	.84822884	.8948364						
57	.80322109	.8524574						
58	.7486901	.8144197						
59	.6884022	.7627892						
60	.6226246	.7041580						
61	.5531064	.6396637						
62	.4819351	.5709403						
63	.4113487	.50000000						
64	.3435305	.4290897						
65	.2804080	.3603363						
66	.2234430	.2958420						
67	.1737812	.2372308						
68	.1317218	.1855803						
69	.0972545	.1414426						
70	.0698880	.1051636						
71	.0488711	.0750404						
72	.0332215	.0515157						
73	.0219445	.0366072						
74	.0140782	.0243311						
75	.0087678	.0147047						
76	.0052074	.0098187						
77	.0031042	.0059705						
78	.0017632	.0035237						
79	.0009704	.0020124						
80	.0005178	.0011132						

$$I(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

$$n = 125$$

	.40	.50
81	.00006670	.00005962
82	.00001332	.00001090
83	.00000643	.00001549
84	.00000300	.00000751
85	.00000115	.00000151
86	.00000059	.00000159
87	.00000025	.00000069
88	.00000010	.00000029
89	.00000004	.00000012
90	.00000001	.00000005
91	.00000001	.00000002
92		.00000001

AMCP 706-109

$$P(r, p, p) = \sum_{n=0}^{\infty} \binom{n}{r} p^r (1-p)^{n-r}$$

n = 126

r	.01	.02	.03	.04	.05	.06	.07	.08
1	.7181393	.8215694	.9784604	.9941632	.9984398	.9995887	.9998931	.9999786
2	.3594075	.7198907	.8945224	.9635200	.9880934	.9962812	.9987996	.9996288
3	.1387354	.4626475	.7322711	.8837199	.9540590	.9830863	.9941116	.9980430
4	.0383814	.2456532	.5248711	.7462863	.8800193	.9482745	.9792781	.9921854
5	.0090124	.1094762	.3276000	.5701397	.7601920	.8799461	.9449453	.9765825
6	.0017739	.0416686	.1787420	.3911782	.6063084	.7735287	.8818913	.9432900
7	.0002994	.0137606	.0858976	.2407804	.4429759	.6365447	.7861808	.8850127
8	.0000441	.0039969	.0166723	.0667064	.0256062	.0866333	.0266821	.0781398
9	.0000030	.0010329	.0040261	.0066706	.0023448	.0043362	.0014106	.0037715
10	.0000007	.0002398	.0008431	.0030385	.0010620	.0023214	.0007956	.0017660
11	.0000001	.0000504	.0015202	.0125898	.0515947	.1362873	.0877886	.0273220
12		.0000097	.0004364	.0047968	.0243842	.0764163	.1784061	.0307020
13		.0000017	.0001152	.0016850	.0106597	.0397930	.1036043	.0208019
14		.0000003	.0000281	.0004381	.0043253	.0128935	.0381917	.0122527
15			.0000064	.0001657	.0016343	.0087322	.0306023	.0079467
16			.0000013	.0000467	.0003698	.0015098	.0150968	.0043364
17			.0000003	.0000123	.0001907	.0014698	.0070002	.0024574
18				.0000030	.0000592	.0005493	.0030569	.0117096
19				.0000007	.0000173	.0001934	.0012596	.0055236
20				.0000002	.0000048	.0000643	.0004906	.0034660
21					.0000012	.0000202	.0001809	.0010435
22					.0000003	.0000060	.0000633	.0004192
23					.0000001	.0000017	.0000210	.0001601
24						.0000005	.0000066	.0000388
25						.0000001	.0000020	.0000201
26							.0000006	.0000067
27							.0000008	.0000021
28								.0000006
29								.0000002
30								.0000001
31								
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$$I(x, y, z) = \sum_{n=1}^{\infty} \frac{1}{n^2} \left(\frac{r}{R} \right)^n \cos(n\theta) \cos(n\phi)$$

n = 120

	.17	.18	.19	.20	.21	.22	.23	.24
16	.9243162	.9571364	.9769416	.9881927	.9948337	.9973096	.9987989	.9994868
17	.8807267	.9288531	.9572056	.9704921	.9782349	.9824427	.9851352	.9868507
18	.8029574	.8477338	.9324745	.9614073	.9790047	.9871090	.9924060	.9944323
19	.7513066	.8335951	.8943983	.9363482	.9635030	.9800622	.9906079	.9948340
20	.6678880	.7660433	.8436300	.9007379	.9400800	.9655560	.9811217	.9901210
21	.5764794	.6867112	.7799189	.8531091	.9067690	.9436685	.9675603	.9821741
22	.4819767	.5918100	.7044444	.7930032	.8620731	.9125064	.9471133	.9695069
23	.3895558	.5047185	.6200333	.7212954	.8053675	.8705594	.9179338	.9504132
24	.3040383	.4153105	.5304599	.6403246	.7372064	.8170572	.8765930	.9231538
25	.2280319	.3389197	.4402874	.5532457	.6594510	.7522968	.8281285	.8862074
26	.1659846	.2520739	.3353891	.4165272	.5751186	.6777725	.7666140	.8366050
27	.1159804	.1863090	.2535335	.3178368	.4680354	.5961193	.6752833	.7402100
28	.0780481	.1328416	.2070372	.2959077	.4032394	.5108214	.6164882	.7119118
29	.0503780	.0913439	.1503781	.2280734	.3217185	.4257579	.5388970	.6516541
30	.0315646	.0605608	.1054657	.1684984	.2493328	.3446806	.4487240	.5542756
31	.0189731	.0387124	.0714025	.1203420	.1871170	.2707409	.3674297	.4711839
32	.0109365	.0230602	.0466580	.0803596	.1359020	.2081582	.2922316	.3899261
33	.0061302	.0141814	.0294300	.0533890	.0944852	.1520807	.2354482	.3477469
34	.0032969	.0081395	.0171150	.0356843	.0648826	.1086337	.1688108	.2452221
35	.0017096	.0044957	.0105281	.0222097	.0426308	.0751147	.1234544	.1860320
36	.0008550	.0023991	.0059735	.0133550	.0270837	.0502639	.08660573	.1368997
37	.0004135	.0012356	.0032730	.0077593	.0166353	.0325463	.0585757	.0976801
38	.0002192	.0006191	.0016431	.0041464	.0094485	.0203997	.0384683	.0675540
39	.0001064	.0003251	.0008456	.0021641	.0056743	.0133608	.0266393	.0482724
40	.0000375	.0001169	.0003175	.0008240	.0021517	.00572504	.0132284	.0293957
41	.0000157	.0000614	.0002082	.0006290	.0016932	.0041154	.0091077	.0184909
42	.0000064	.0000266	.0000965	.0003065	.0008800	.0022606	.0053753	.0112476
43	.0000025	.0000101	.0000431	.0001464	.0004485	.0012019	.0029586	.0066613
44	.0000009	.0000045	.0000186	.0000672	.0002153	.0006186	.0016067	.0038805
45	.0000003	.0000018	.0000078	.0000298	.0001014	.0003082	.0008450	.0021071
46	.0000001	.0000007	.0000031	.0000128	.0000462	.0001487	.0004305	.0011309
47	.0000000	.0000002	.0000013	.0000053	.0000204	.0000755	.0002124	.0005881
48	.0000000	.0000001	.0000005	.0000021	.0000087	.0000331	.0001045	.0002864
49	.0000000	.0000000	.0000002	.0000008	.0000036	.0000138	.0000470	.0001247
50	.0000000	.0000000	.0000001	.0000003	.0000014	.0000058	.0000211	.0000685
51	.0000000	.0000000	.0000000	.0000001	.0000006	.0000024	.0000092	.0000314
52	.0000000	.0000000	.0000000	.0000000	.0000002	.0000010	.0000039	.0000140
53	.0000000	.0000000	.0000000	.0000000	.0000001	.0000004	.0000016	.0000060
54	.0000000	.0000000	.0000000	.0000000	.0000000	.0000001	.0000005	.0000024
55	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000002	.0000010
56	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000001	.0000004
57	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000002
58	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000001

	.25	.26	.27	.28	.29	.30	.31	.32
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	.99999992	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	.99999985	.99999991	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
13	.99999978	.99999984	.99999990	.99999996	.99999999	1.00000000	1.00000000	1.00000000
14	.99999971	.99999977	.99999983	.99999989	.99999995	.99999999	1.00000000	1.00000000
15	.99999964	.99999970	.99999976	.99999982	.99999988	.99999994	.99999999	1.00000000
16	.99999957	.99999963	.99999969	.99999975	.99999981	.99999987	.99999993	.99999999
17	.99999950	.99999956	.99999962	.99999968	.99999974	.99999980	.99999986	.99999992
18	.99999943	.99999949	.99999955	.99999961	.99999967	.99999973	.99999979	.99999985
19	.99999936	.99999942	.99999948	.99999954	.99999960	.99999966	.99999972	.99999978
20	.99999929	.99999935	.99999941	.99999947	.99999953	.99999959	.99999965	.99999971
21	.99999922	.99999928	.99999934	.99999940	.99999946	.99999952	.99999958	.99999964
22	.99999915	.99999921	.99999927	.99999933	.99999939	.99999945	.99999951	.99999957
23	.99999908	.99999914	.99999920	.99999926	.99999932	.99999938	.99999944	.99999950
24	.99999901	.99999907	.99999913	.99999919	.99999925	.99999931	.99999937	.99999943
25	.99999894	.99999900	.99999906	.99999912	.99999918	.99999924	.99999930	.99999936
26	.99999887	.99999893	.99999899	.99999905	.99999911	.99999917	.99999923	.99999929
27	.99999880	.99999886	.99999892	.99999898	.99999904	.99999910	.99999916	.99999922
28	.99999873	.99999879	.99999885	.99999891	.99999897	.99999903	.99999909	.99999915
29	.99999866	.99999872	.99999878	.99999884	.99999890	.99999896	.99999902	.99999908
30	.99999859	.99999865	.99999871	.99999877	.99999883	.99999889	.99999895	.99999901
31	.99999852	.99999858	.99999864	.99999870	.99999876	.99999882	.99999888	.99999894
32	.99999845	.99999851	.99999857	.99999863	.99999869	.99999875	.99999881	.99999887
33	.99999838	.99999844	.99999850	.99999856	.99999862	.99999868	.99999874	.99999880
34	.99999831	.99999837	.99999843	.99999849	.99999855	.99999861	.99999867	.99999873
35	.99999824	.99999830	.99999836	.99999842	.99999848	.99999854	.99999860	.99999866
36	.99999817	.99999823	.99999829	.99999835	.99999841	.99999847	.99999853	.99999859
37	.99999810	.99999816	.99999822	.99999828	.99999834	.99999840	.99999846	.99999852
38	.99999803	.99999809	.99999815	.99999821	.99999827	.99999833	.99999839	.99999845
39	.99999796	.99999802	.99999808	.99999814	.99999820	.99999826	.99999832	.99999838
40	.99999789	.99999795	.99999801	.99999807	.99999813	.99999819	.99999825	.99999831
41	.99999782	.99999788	.99999794	.99999800	.99999806	.99999812	.99999818	.99999824
42	.99999775	.99999781	.99999787	.99999793	.99999799	.99999805	.99999811	.99999817
43	.99999768	.99999774	.99999780	.99999786	.99999792	.99999798	.99999804	.99999810
44	.99999761	.99999767	.99999773	.99999779	.99999785	.99999791	.99999797	.99999803
45	.99999754	.99999760	.99999766	.99999772	.99999778	.99999784	.99999790	.99999796
46	.99999747	.99999753	.99999759	.99999765	.99999771	.99999777	.99999783	.99999789
47	.99999740	.99999746	.99999752	.99999758	.99999764	.99999770	.99999776	.99999782
48	.99999733	.99999739	.99999745	.99999751	.99999757	.99999763	.99999769	.99999775
49	.99999726	.99999732	.99999738	.99999744	.99999750	.99999756	.99999762	.99999768
50	.99999719	.99999725	.99999731	.99999737	.99999743	.99999749	.99999755	.99999761

$$f(x) = \sum_{n=0}^{\infty} \frac{f^{(n)}(a)}{n!} (x-a)^n$$

X	.25	.26	.27	.28	.29	.30	.31	.32
51	.0000074	.0002756	.0007154	.0017131	.0030035	.0047043	.0115042	.0275911
52	.00000456	.0001357	.0003697	.0009381	.001870	.0032622	.0054100	.0117020
53	.00000267	.0000668	.0001853	.0004070	.0008170	.0014629	.0025555	.0041159
54	.00000101	.0000300	.0000801	.0001810	.0003329	.0005985	.0010298	.0017939
55	.00000034	.0000115	.0000345	.0000810	.0001510	.0002684	.0004697	.0008017
56	.00000014	.0000059	.0000194	.0000550	.0001151	.0002374	.0004627	.0008363
57	.00000004	.0000025	.0000083	.0000235	.0000505	.0001082	.0002182	.0004287
58	.00000001	.0000010	.0000037	.0000104	.0000238	.0000511	.0001061	.0002182
59	.00000001	.0000004	.0000015	.0000045	.0000105	.0000230	.0000489	.0000984
60	.00000001	.0000002	.0000006	.0000017	.0000040	.0000088	.0000184	.0000379
61		.0000001	.0000002	.0000006	.0000016	.0000034	.0000070	.0000140
62			.0000001	.0000004	.0000011	.0000024	.0000050	.0000100
63				.0000001	.0000004	.0000011	.0000024	.0000050
64					.0000001	.0000004	.0000011	.0000024
65						.0000001	.0000004	.0000011
66							.0000001	.0000004
67								.0000001
68								
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[illegible]

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$$P(c, n, p) = \sum_{i=0}^n \binom{n}{i} p^i (1-p)^{n-i}$$

n = 126

λ	.41	.42	.43	.44	.45	.46	.47	.48
82		.00000001	.00000002	.00000013	.00000045	.00001235	.00003330	.00000831
83		.00000001	.00000002	.00000006	.00000019	.00000555	.00001551	.00003395
84			.00000001	.00000009	.00000033	.00000983	.00002677	.00006181
85				.00000001	.00000008	.00000210	.00000629	.00001681
86					.00000001	.00000004	.00000119	.00000335
87						.00000001	.00000005	.00000114
88							.00000002	.00000006
89							.00000001	.00000008
90								.00000001

λ	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	1.00000000	1.00000000
19	1.00000000	1.00000000
20	1.00000000	1.00000000
21	1.00000000	1.00000000
22	1.00000000	1.00000000
23	1.00000000	1.00000000
24	1.00000000	1.00000000
25	1.00000000	1.00000000
26	1.00000000	1.00000000
27	1.00000000	1.00000000
28	1.00000000	1.00000000
29	1.00000000	1.00000000
30	1.00000000	1.00000000
31	1.00000000	1.00000000
32	1.00000000	1.00000000
33	.99999999	1.00000000
34	.99999999	1.00000000
35	.99999999	.99999999
36	.99999999	.99999997
37	.99999999	.99999992
38	.99999999	.99999980
39	.99999999	.99999951
40	.99999999	.99999906
41	.99999999	.99999745
42	.99999999	.99999449
43	.99999999	.99999050
44	.99999999	.99998680
45	.99999999	.99998347
46	.99999999	.99998053
47	.99999999	.99997802
48	.99999999	.99997590
49	.99999999	.99997414
50	.99999999	.99997279
51	.99999999	.99997183
52	.99999999	.99997121
53	.99999999	.99997090
54	.99999999	.99997086
55	.99999999	.99997119
56	.99999999	.99997180
57	.99999999	.99997249
58	.99999999	.99997313
59	.99999999	.99997364
60	.99999999	.99997404
61	.99999999	.99997436
62	.99999999	.99997460
63	.99999999	.99997478
64	.99999999	.99997490
65	.99999999	.99997500
66	.99999999	.99997509
67	.99999999	.99997516
68	.99999999	.99997521
69	.99999999	.99997525
70	.99999999	.99997528
71	.99999999	.99997530
72	.99999999	.99997531
73	.99999999	.99997532
74	.99999999	.99997533
75	.99999999	.99997534
76	.99999999	.99997535
77	.99999999	.99997536
78	.99999999	.99997537
79	.99999999	.99997538
80	.99999999	.99997539

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

$\frac{c}{n}$	.49	.50
81	.0003895	.0008547
82	.0001987	.0004526
83	.0000980	.0002320
84	.0000468	.0001150
85	.0000216	.0000551
86	.0000096	.0000258
87	.0000041	.0000114
88	.0000017	.0000049
89	.0000007	.0000020
90	.0000003	.0000008
91	.0000001	.0000003
92		.0000001

n = 227

224

$$p(c, n, \tau) = \sum_{r=0}^n \binom{n}{r} \tau^r (1-\tau)^{n-r}$$

	.17	.18	.19	.20	.21	.22	.23	.24
16	.9295312	.9308586	.9790037	.9893727	.9946713	.9976359	.9980575	.9995597
17	.9895369	.9363234	.9626361	.9800066	.9898107	.9950456	.9976980	.9993755
18	.9377782	.9380641	.9375676	.9647179	.9810271	.9902752	.9952415	.9977741
19	.7634782	.4073540	.9014328	.9413600	.9667584	.9802527	.9907574	.9954537
20	.6820692	.7787026	.8532760	.9078610	.9499768	.9687480	.9830735	.9912459
21	.5920189	.7009909	.7920240	.8626349	.9137643	.9484839	.9706794	.9840614
22	.4980421	.6146322	.7188017	.8050267	.8717452	.9151620	.9518681	.9724711
23	.4053006	.5232949	.6266751	.7135651	.7817757	.8379781	.8846682	.9242972
24	.3135931	.4317439	.5474788	.6564382	.7515218	.8281272	.8844660	.9283014
25	.2116170	.3346979	.4574202	.5706455	.6757800	.7661441	.8397307	.9050746
26	.1766257	.2459562	.3203858	.4022709	.4928284	.5941679	.7176609	.8500298
27	.1244813	.1981467	.2790292	.3659597	.4603229	.5641823	.6785586	.7942284
28	.0844866	.1484458	.2200173	.3045461	.4030400	.5159369	.6444660	.7830164
29	.0552479	.0988135	.1611433	.2421768	.3386405	.4444719	.5650765	.6939560
30	.0347969	.0660108	.1139990	.1804134	.2645378	.3625576	.4690038	.5739065
31	.0211136	.0426451	.0778745	.1299773	.2001830	.2878076	.3946127	.5114912
32	.0123442	.0245336	.0415601	.0650161	.1046680	.1620364	.2305271	.3109428
33	.0069588	.0159236	.0327019	.0609252	.1039735	.1639777	.2400853	.3320299
34	.0037786	.0092189	.0201023	.0396252	.0713093	.1101280	.1818604	.2616681
35	.0019794	.0051498	.0119316	.0249046	.0473037	.0824689	.1331264	.2008276
36	.0010003	.0027765	.0068385	.0151259	.03033478	.0557311	.0944286	.1486914
37	.0004878	.0014451	.0037861	.0088764	.0188292	.0364442	.0648964	.1079029
38	.0002296	.0007263	.0020249	.0050370	.0112986	.0230600	.0432000	.0747841
39	.0001043	.0003526	.0010464	.0026725	.0065575	.0141274	.0276522	.0506200
40	.0000456	.0001654	.0005226	.0014649	.0036815	.0091747	.0173098	.0332065
41	.0000194	.0000750	.0002524	.0007512	.0019955	.0048051	.0105145	.0211080
42	.0000080	.0000328	.0001178	.0003726	.0010500	.0026577	.0061567	.0130032
43	.0000032	.0000139	.0000532	.0001788	.0005344	.0013439	.0034914	.0077592
44	.0000013	.0000055	.0000232	.0000832	.0002636	.0007107	.0019107	.0044807
45	.0000004	.0000018	.0000088	.0000373	.0001253	.0003725	.0010282	.0025143
46	.0000002	.0000009	.0000040	.0000162	.0000578	.0001818	.0005258	.0013652
47	.0000001	.0000003	.0000016	.0000068	.0000258	.0000867	.0002825	.0007184
48		.0000001	.0000008	.0000038	.0000152	.0000512	.0001678	.0004384
49			.0000003	.0000011	.0000047	.0000177	.0000595	.0001881
50			.0000001	.0000004	.0000019	.0000076	.0000271	.0000866
51				.0000002	.0000007	.0000032	.0000119	.0000401
52				.0000001	.0000003	.0000015	.0000061	.0000201
53					.0000001	.0000005	.0000022	.0000097
54								

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 127

	.25	.26	.27	.28	.29	.30	.31	.32
51	.0001235	.0003451	.0008647	.0020924	.0045000	.0093483	.0178875	.0380576
52	.0000586	.0001721	.0004630	.0011479	.0026345	.0056226	.0112063	.0209350
53	.0000269	.0000832	.0002351	.0006111	.0014683	.0032767	.0068198	.0132851
54	.0000120	.0000390	.0001158	.0003156	.0007943	.0018538	.0040300	.0081908
55	.0000058	.0000178	.0000553	.0001582	.0004170	.0010182	.0023127	.0049056
56	.0000023	.0000078	.0000257	.0000769	.0002125	.0005429	.0012887	.0028537
57	.0000009	.0000034	.0000115	.0000363	.0001051	.0002809	.0006972	.0016122
58	.0000003	.0000014	.0000050	.0000166	.0000504	.0001411	.0003663	.0008844
59	.0000001	.0000006	.0000021	.0000074	.0000235	.0000688	.0001867	.0004711
60		.0000002	.0000009	.0000032	.0000106	.0000326	.0000924	.0002436
61		.0000001	.0000003	.0000013	.0000047	.0000149	.0000444	.0001223
62			.0000001	.0000005	.0000020	.0000067	.0000207	.0000596
63			.0000001	.0000002	.0000008	.0000029	.0000094	.0000302
64				.0000001	.0000003	.0000012	.0000041	.0000129
65					.0000001	.0000005	.0000018	.0000058
66						.0000002	.0000007	.0000025
67						.0000001	.0000003	.0000010
68							.0000001	.0000004
69								.0000002
70								.0000001
	.33	.34	.35	.36	.37	.38	.39	.40
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
14	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
15	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
16	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
17	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
18	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
19	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
20	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
21	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
22	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
23	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
24	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
25	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
26	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
27	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
28	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
29	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
30	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
31	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
32	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
33	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
34	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
35	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
36	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
37	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
38	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
39	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
40	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
41	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
42	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
43	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
44	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
45	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
46	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
47	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
48	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
49	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
50	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
51	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
52	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
53	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
54	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
55	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
56	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
57	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
58	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
59	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
60	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
61	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
62	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
63	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
64	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
65	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
66	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
67	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
68	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
69	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
70	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 127

	.33	.34	.35	.36	.37	.38	.39	.40
71	.00000001	.00000003	.00000012	.00000038	.0000115	.0000322	.00000848	.00003109
72	.00000001	.00000005	.00000016	.00000051	.0000051	.0000149	.00000410	.00001061
73	.00000001	.00000009	.00000027	.00000077	.0000022	.0000067	.00000192	.00000518
74		.00000011	.00000031	.00000093	.0000029	.00000829	.00000288	.00000845
75			.00000001	.00000001	.00000004	.00000018	.00000039	.00000113
76					.00000001	.00000005	.00000017	.00000050
77					.00000001	.00000002	.00000007	.00000022
78						.00000001	.00000003	.00000009
79							.00000001	.00000004
80								.00000001
81								.00000001
	.41	.42	.43	.44	.45	.46	.47	.48
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
14	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
15	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
16	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
17	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
18	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
19	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
20	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
21	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
22	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
23	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
24	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
25	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
26	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
27	.99999992	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
28	.99999980	.99999993	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
29	.99999948	.99999982	.99999994	.99999996	.99999999	1.00000000	1.00000000	1.00000000
30	.99999874	.99999954	.99999984	.99999995	.99999998	.99999999	1.00000000	1.00000000
31	.99999705	.99999887	.99999959	.99999986	.99999995	.99999998	1.00000000	1.00000000
32	.99999537	.99999717	.99999900	.99999964	.99999987	.99999996	.99999999	1.00000000
33	.99999370	.99999550	.99999732	.99999823	.99999908	.99999989	.99999996	.99999999
34	.99999203	.99999383	.99999565	.99999656	.99999741	.99999826	.99999911	.99999997
35	.99999036	.99999216	.99999398	.99999489	.99999574	.99999659	.99999744	.99999829
36	.99998869	.99999049	.99999231	.99999322	.99999407	.99999492	.99999577	.99999662
37	.99998702	.99998882	.99999064	.99999155	.99999240	.99999325	.99999410	.99999495
38	.99998535	.99998715	.99998897	.99998988	.99999073	.99999158	.99999243	.99999328
39	.99998368	.99998548	.99998730	.99998821	.99998906	.99998991	.99999076	.99999161
40	.99998201	.99998381	.99998563	.99998654	.99998739	.99998824	.99998909	.99998994
41	.99998034	.99998214	.99998396	.99998487	.99998572	.99998657	.99998742	.99998827
42	.99997867	.99998047	.99998229	.99998320	.99998405	.99998490	.99998575	.99998660
43	.99997700	.99997880	.99998062	.99998153	.99998238	.99998323	.99998408	.99998493
44	.99997533	.99997713	.99997895	.99997986	.99998071	.99998156	.99998241	.99998326
45	.99997366	.99997546	.99997728	.99997819	.99997904	.99997989	.99998074	.99998159
46	.99997199	.99997379	.99997561	.99997652	.99997737	.99997822	.99997907	.99997992
47	.99997032	.99997212	.99997394	.99997485	.99997570	.99997655	.99997740	.99997825
48	.99996865	.99997045	.99997227	.99997318	.99997403	.99997488	.99997573	.99997658
49	.99996698	.99996878	.99997060	.99997151	.99997236	.99997321	.99997406	.99997491
50	.99996531	.99996711	.99996893	.99996984	.99997069	.99997154	.99997239	.99997324
51	.99996364	.99996544	.99996726	.99996817	.99996902	.99996987	.99997072	.99997157
52	.99996197	.99996377	.99996559	.99996650	.99996735	.99996820	.99996905	.99996990
53	.99996030	.99996210	.99996392	.99996483	.99996568	.99996653	.99996738	.99996823
54	.99995863	.99996043	.99996225	.99996316	.99996401	.99996486	.99996571	.99996656
55	.99995696	.99995876	.99996058	.99996149	.99996234	.99996319	.99996404	.99996489
56	.99995529	.99995709	.99995891	.99995982	.99996067	.99996152	.99996237	.99996322
57	.99995362	.99995542	.99995724	.99995815	.99995900	.99995985	.99996070	.99996155
58	.99995195	.99995375	.99995557	.99995648	.99995733	.99995818	.99995903	.99995988
59	.99995028	.99995208	.99995390	.99995481	.99995566	.99995651	.99995736	.99995821
60	.99994861	.99995041	.99995223	.99995314	.99995400	.99995485	.99995570	.99995655
61	.99994694	.99994874	.99995056	.99995147	.99995232	.99995317	.99995402	.99995487
62	.99994527	.99994707	.99994889	.99994980	.99995065	.99995150	.99995235	.99995320
63	.99994360	.99994540	.99994722	.99994813	.99994898	.99994983	.99995068	.99995153
64	.99994193	.99994373	.99994555	.99994646	.99994731	.99994816	.99994901	.99994986
65	.99994026	.99994206	.99994388	.99994479	.99994564	.99994649	.99994734	.99994819
66	.99993859	.99994039	.99994221	.99994312	.99994397	.99994482	.99994567	.99994652
67	.99993692	.99993872	.99994054	.99994145	.99994230	.99994315	.99994400	.99994485
68	.99993525	.99993705	.99993887	.99993978	.99994063	.99994148	.99994233	.99994318
69	.99993358	.99993538	.99993720	.99993811	.99993896	.99993981	.99994066	.99994151
70	.99993191	.99993371	.99993553	.99993644	.99993729	.99993814	.99993899	.99993984
71	.99993024	.99993204	.99993386	.99993477	.99993562	.99993647	.99993732	.99993817
72	.99992857	.99993037	.99993219	.99993310	.99993395	.99993480	.99993565	.99993650
73	.99992690	.99992870	.99993052	.99993143	.99993228	.99993313	.99993398	.99993483
74	.99992523	.99992703	.99992885	.99992976	.99993061	.99993146	.99993231	.99993316
75	.99992356	.99992536	.99992718	.99992809	.99992894	.99992979	.99993064	.99993149
76	.99992189	.99992369	.99992551	.99992642	.99992727	.99992812	.99992897	.99992982
77	.99992022	.99992202	.99992384	.99992475	.99992560	.99992645	.99992730	.99992815
78	.99991855	.99992035	.99992217	.99992308	.99992393	.99992478	.99992563	.99992648
79	.99991688	.99991868	.99992050	.99992141	.99992226	.99992311	.99992396	.99992481
80	.99991521	.99991701	.99991883	.99991974	.99992059	.99992144	.99992229	.99992314
81	.99991354	.99991534	.99991716	.99991807	.99991892	.99991977	.99992062	.99992147

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$$P(n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 127

	.41	.42	.43	.44	.45	.46	.47	.48
82	.00000001	.00000002	.00000003	.00000004	.00000007	.00000014	.00000030	.00000064
83		.00000001	.00000003	.00000010	.00000031	.00000087	.00000238	.00000604
84			.00000001	.00000004	.00000013	.00000038	.00000106	.00000284
85				.00000002	.00000005	.00000016	.00000047	.00000139
86				.00000001	.00000002	.00000006	.00000020	.00000057
87					.00000001	.00000003	.00000008	.00000024
88						.00000001	.00000003	.00000010
89							.00000001	.00000004
90								.00000001
91								.00000001

	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
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26	1.00000000	1.00000000
27	1.00000000	1.00000000
28	1.00000000	1.00000000
29	1.00000000	1.00000000
30	1.00000000	1.00000000
31	1.00000000	1.00000000
32	1.00000000	1.00000000
33	1.00000000	1.00000000
34	.99999999	1.00000000
35	.99999997	.99999999
36	.99999993	.99999998
37	.99999983	.99999994
38	.99999959	.99999985
39	.99999903	.99999965
40	.99999781	.99999918
41	.99999524	.99999815
42	.99999001	.99999597
43	.99997970	.99999150
44	.99996013	.99998265
45	.99992421	.99996377
46	.99986058	.99993463
47	.99975159	.99979912
48	.99957113	.99958365
49	.99928216	.99924022
50	.99883453	.99866977
51	.99816361	.99866996
52	.99719039	.99736052
53	.99588376	.99475665
54	.99366870	.99233477
55	.99151932	.99007822
56	.98939963	.98782999
57	.98734591	.98550174
58	.98533989	.98325487
59	.98338596	.98102213
60	.98147686	.97879390
61	.97961364	.97656923
62	.97779862	.97434665
63	.97603376	.97212681
64	.97431870	.96990900
65	.97265355	.96769319
66	.97103801	.96547935
67	.96947283	.96326777
68	.96795774	.96105810
69	.96649253	.95885085
70	.96507717	.95664573
71	.96371172	.95444326
72	.96239619	.95224301
73	.96113058	.95004485
74	.95991480	.94784833
75	.95874888	.94565315
76	.95763289	.94345998
77	.95656681	.94126944
78	.95555060	.93908125
79	.95458432	.93689519
80	.95366799	.93471104
81	.95280160	.93252858
82	.95198513	.93034753
83	.95121867	.92816869

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n = 127

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

	.49	.50
84	.0000719	.0001738
85	.0000339	.0000850
86	.0000155	.0000403
87	.0000068	.0000183
88	.0000030	.0000083
89	.0000012	.0000038
90	.0000005	.0000014
91	.0000002	.0000006
92	.0000001	.0000003
93		.0000001

$$F(r, r, r) = \sum_{n=0}^{\infty} \binom{n}{r} r^r (1-r)^{n-r}$$

n = 128

X	.01	.02	.03	.04	.05	.06	.07	.08
1	.7237463	.9244753	.9757333	.9946208	.9985919	.9996366	.9999074	.9999768
2	.3665745	.7279086	.8995028	.9659317	.9891061	.9966677	.9990171	.9997190
3	.1374781	.4729150	.7419357	.8900252	.9574032	.9846341	.9947608	.9982953
4	.0402857	.2543491	.5712611	.7571868	.8893433	.9523738	.9813054	.9930955
5	.0096063	.1145576	.3354445	.5842248	.7720603	.8880248	.9466563	.9798958
6	.0019209	.0444084	.1877170	.4054952	.6216117	.7761617	.8905781	.9484948
7	.0003295	.0148929	.0915187	.2528104	.4592855	.6528727	.7994197	.8941760
8	.0000493	.0043947	.0326651	.1419667	.3303849	.5045938	.6798356	.8118364
9	.0000065	.0011542	.0154088	.0720994	.1910521	.3614416	.5436962	.7035872
10	.0000008	.0002724	.0054062	.0332643	.1086712	.2396059	.4070689	.5760577
11	.0000001	.0000582	.0017249	.0140385	.0565737	.1470696	.2846919	.4401620
12		.0000114	.0005035	.0054362	.0271598	.0813785	.1838811	.3269944
13		.0000020	.0001352	.0019415	.0120659	.0444714	.1133668	.2426544
14		.0000003	.0000135	.0000622	.0049772	.0218115	.0646640	.1445559
15		.0000001	.0000007	.0001975	.0019125	.0100353	.0343521	.0876206
16			.00000017	.0000566	.0000687	.0043227	.0173268	.0499037
17			.00000003	.0000038	.0000730	.0056444	.0081701	.0258859
18			.00000001	.0000009	.0000217	.0023822	.0015217	.0065490
19				.00000002	.0000006	.0000086	.0000603	.0029752
20					.00000016	.0000025	.0000265	.0012816
21					.00000004	.0000007	.0000087	.0003249
22					.00000001	.0000003	.0000027	.0002039
23						.0000006	.0000068	.0000755
24						.0000002	.0000027	.0000256
25							.0000008	.0000020
26							.0000003	.0000029
27							.0000001	.0000009
28								.0000007
29								.0000001
30								.0000001
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$$Y(x, y, z) = \sum_{n=0}^{\infty} \frac{(-1)^n}{n!} \left(\frac{\partial}{\partial x} \right)^n \left(\frac{\partial}{\partial y} \right)^n \left(\frac{\partial}{\partial z} \right)^n$$

	.17	.18	.19	.20	.21	.22	.23	.24
16	.9344394	.9636770	.9800976	.9904431	.9951424	.9979246	.9990961	.9996230
17	.8951739	.9384656	.9657439	.9810798	.9908734	.9956155	.9979877	.9991165
18	.8421892	.9020055	.9423306	.9677756	.9828716	.9913247	.9950065	.9980627
19	.7752667	.8526506	.9084604	.9460316	.9697548	.9830616	.9917888	.9960106
20	.6959103	.7899274	.8624638	.9145600	.9495683	.9716750	.9848408	.9925888
21	.6073274	.7148890	.8036619	.8717999	.9203235	.9529420	.9735300	.9850018
22	.5140182	.6301768	.7327263	.8165484	.8803413	.9257788	.9561547	.9753153
23	.4210666	.5397356	.6517913	.7495135	.8286548	.8884928	.9309128	.9592092
24	.3333251	.4482395	.5643129	.6782776	.7653301	.8400308	.8961628	.9357687
25	.2547012	.3603698	.4745313	.5878030	.6916058	.7802477	.8507517	.9033836
26	.1877099	.2801297	.3869223	.4999450	.6102483	.7100906	.7943840	.8608404
27	.1333532	.2103524	.2955116	.4129339	.5244090	.6317017	.7255321	.8046180
28	.0912940	.1524883	.2333699	.3307566	.4383680	.5481761	.6522049	.7441245
29	.0602202	.1066709	.1723294	.2566507	.3557898	.4631072	.5710215	.6717994
30	.0382736	.0719899	.1289564	.1927661	.2680052	.3505476	.4374021	.5255042
31	.0234398	.0466873	.0847381	.1400613	.2136956	.3036198	.4044974	.5104697
32	.0138350	.0294337	.0563978	.0984075	.1570982	.2352075	.3271455	.4360755
33	.0078718	.0187334	.0368469	.0668417	.1129372	.1771032	.2566730	.3506055
34	.0043187	.0104257	.02024964	.0433887	.0781608	.1283649	.1954362	.2785529
35	.0022053	.0058822	.0114841	.0227487	.0423448	.0750336	.1143375	.1719880
36	.0011667	.0032837	.0078865	.0177716	.0353905	.0616178	.1013266	.1610625
37	.0005744	.0016847	.0043361	.0101279	.0212401	.0406873	.0716088	.1170967
38	.0002735	.0008556	.0023595	.0058053	.0128801	.0266084	.0481908	.0825183
39	.0001256	.0004198	.0012323	.0032174	.0075532	.0160937	.0313824	.0564194
40	.0000558	.0001991	.0006232	.0017244	.0042854	.0096403	.0197961	.0373885
41	.0000239	.0000912	.0003037	.0008940	.0023527	.0055904	.0120950	.0240116
42	.0000099	.0000443	.0001544	.0004230	.0011250	.0028367	.0061590	.0120065
43	.0000043	.0000173	.0000655	.0002176	.0006438	.0017063	.0041044	.0089017
44	.0000015	.0000072	.0000289	.0001022	.0003200	.0008983	.0022796	.0052723
45	.0000006	.0000029	.0000124	.0000464	.0001543	.0004580	.0012266	.0029877
46	.0000002	.0000011	.0000051	.0000204	.0000720	.0002262	.0006395	.0016410
47	.0000001	.0000004	.0000018	.0000067	.0000234	.0000781	.0002159	.0005907
48		.0000002	.0000008	.0000036	.0000143	.0000502	.0001542	.0004309
49		.0000001	.0000003	.0000014	.0000060	.0000225	.0000751	.0002256
50			.0000001	.0000006	.0000025	.0000098	.0000345	.0001094
51				.0000002	.0000010	.0000041	.0000154	.00006515
52				.0000001	.0000004	.0000017	.0000067	.00002835
53					.0000001	.0000005	.0000028	.00001104
54					.0000001	.0000003	.0000011	.0000045
55						.0000001	.0000004	.0000019
56							.0000002	.0000007
57							.0000001	.0000003
58								.0000001
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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 120

x	.25	.26	.27	.28	.29	.30	.31	.32
51	.0001558	.0004299	.0010886	.0025429	.0055066	.0111049	.0209409	.0370671
52	.0000748	.0002170	.0005765	.0014124	.0032010	.0067465	.0132775	.0244943
53	.0000348	.0001063	.0002967	.0007614	.0018065	.0039805	.0081798	.0157331
54	.0000157	.0000505	.0001400	.0003904	.0009090	.0020207	.0044946	.0098210
55	.0000069	.0000233	.0000717	.0002023	.0005264	.0012689	.0028451	.0059569
56	.0000039	.0000104	.0000337	.0000997	.0002718	.0006855	.0016062	.0035103
57	.0000012	.0000045	.0000153	.0000477	.0001362	.0003595	.0008804	.0020094
58	.0000005	.0000019	.0000060	.0000221	.0000663	.0001831	.0004688	.0011173
59	.0000002	.0000008	.0000029	.0000100	.0000313	.0000905	.0002424	.0006034
60	.0000001	.0000003	.0000012	.0000044	.0000143	.0000434	.0001216	.0003164
61		.0000001	.0000005	.0000018	.0000064	.0000202	.0000593	.0001611
62			.0000002	.0000008	.0000028	.0000091	.0000280	.0000797
63			.0000001	.0000003	.0000012	.0000040	.0000129	.0000382
64				.0000001	.0000005	.0000017	.0000057	.0000178
65					.0000002	.0000007	.0000025	.0000081
66					.0000001	.0000003	.0000010	.0000035
67						.0000001	.0000001	.0000004
68							.0000001	.0000001
69							.0000001	.0000001
70								.0000001

x	.33	.34	.35	.36	.37	.38	.39	.40
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
14	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
15	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
16	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
17	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
18	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
19	.99999991	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
20	.99999974	.99999991	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
21	.99999920	.99999975	.99999992	.99999997	.99999999	1.00000000	1.00000000	1.00000000
22	.99999811	.99999931	.99999976	.99999992	.99999997	.99999999	1.00000000	1.00000000
23	.99999531	.99999821	.99999935	.99999977	.99999992	.99999998	.99999999	1.00000000
24	.99998895	.99998561	.99999833	.99999979	.99999997	.99999999	.99999999	.99999999
25	.99997525	.99998974	.99999592	.99999844	.99999943	.99999980	.99999992	.99999998
26	.99994717	.99997715	.99999053	.99999624	.99999857	.99999948	.99999983	.99999995
27	.99992339	.99995148	.99997903	.99999132	.99999655	.99999869	.99999952	.99999983
28	.99989047	.99990151	.99993565	.99998087	.99999209	.99999687	.99999881	.99999957
29	.99984338	.99988065	.99991023	.99995946	.99998243	.99999284	.99999717	.99999801
30	.99979102	.99984370	.99988258	.99991852	.99996148	.99998433	.99999356	.99999746
31	.99973366	.99976328	.99979603	.99982117	.99985637	.99989711	.99993593	.99997424
32	.99967136	.99969661	.99972694	.99975374	.99978576	.99982374	.99986705	.99990744
33	.99960415	.99962939	.99965457	.99968047	.99971478	.99975716	.99980633	.99986166
34	.99953195	.99955719	.99958236	.99960746	.99963251	.99965763	.99968283	.99970810
35	.99945473	.99947997	.99950514	.99953024	.99955531	.99958043	.99960561	.99963084
36	.99937256	.99939779	.99942297	.99944811	.99947321	.99949836	.99952356	.99954881
37	.99928536	.99931059	.99933577	.99936091	.99938601	.99941116	.99943636	.99946161
38	.99919315	.99921838	.99924356	.99926870	.99929380	.99931895	.99934415	.99936940
39	.99909595	.99912118	.99914636	.99917150	.99919660	.99922175	.99924695	.99927220
40	.99900374	.99902897	.99905415	.99907930	.99910440	.99912955	.99915475	.99918000
41	.99891153	.99893676	.99896194	.99898709	.99901219	.99903734	.99906254	.99908779
42	.99881932	.99884455	.99886973	.99889488	.99891998	.99894513	.99897033	.99899558
43	.99872711	.99875234	.99877752	.99880267	.99882777	.99885292	.99887812	.99890337
44	.99863490	.99866013	.99868531	.99871046	.99873556	.99876071	.99878591	.99881116
45	.99854269	.99856792	.99859310	.99861825	.99864335	.99866850	.99869370	.99871895
46	.99845048	.99847571	.99850089	.99852604	.99855114	.99857629	.99860149	.99862674
47	.99835827	.99838350	.99840868	.99843383	.99845893	.99848408	.99850928	.99853453
48	.99826606	.99829129	.99831647	.99834162	.99836672	.99839187	.99841707	.99844232
49	.99817385	.99819908	.99822426	.99824941	.99827451	.99829966	.99832486	.99835011
50	.99808164	.99810687	.99813205	.99815720	.99818230	.99820745	.99823265	.99825790
51	.99798943	.99801466	.99803984	.99806500	.99809010	.99811525	.99814045	.99816570
52	.99789722	.99792245	.99794763	.99797278	.99799788	.99802298	.99804818	.99807343
53	.99780501	.99783024	.99785542	.99788057	.99790567	.99793077	.99795597	.99798122
54	.99771280	.99773803	.99776321	.99778836	.99781346	.99783856	.99786376	.99788896
55	.99762059	.99764582	.99767100	.99769615	.99772125	.99774635	.99777155	.99779675
56	.99752838	.99755361	.99757879	.99760394	.99762904	.99765414	.99767934	.99770454
57	.99743617	.99746140	.99748658	.99751173	.99753683	.99756193	.99758713	.99761233
58	.99734396	.99736919	.99739437	.99741952	.99744462	.99746972	.99749492	.99752012
59	.99725175	.99727698	.99730216	.99732731	.99735241	.99737751	.99740271	.99742791
60	.99715954	.99718477	.99720995	.99723510	.99726020	.99728530	.99731050	.99733570
61	.99706733	.99709256	.99711774	.99714289	.99716800	.99719310	.99721830	.99724350
62	.99697512	.99699995	.99702473	.99704948	.99707418	.99709888	.99712358	.99714828
63	.99688291	.99690774	.99693252	.99695727	.99698197	.99699667	.99702137	.99704607
64	.99679070	.99681553	.99684031	.99686506	.99688976	.99691446	.99693916	.99696386
65	.99669849	.99672332	.99674810	.99677285	.99679755	.99682225	.99684695	.99687165
66	.99660628	.99663111	.99665589	.99668064	.99670534	.99673004	.99675474	.99677944
67	.99651407	.99653890	.99656368	.99658843	.99661313	.99663783	.99666253	.99668723
68	.99642186	.99644669	.99647147	.99649622	.99652092	.99654562	.99657032	.99659502
69	.99632965	.99635448	.99637926	.99640401	.99642871	.99645341	.99647811	.99650281
70	.99623744	.99626227	.99628705	.99631180	.99633650	.99636120	.99638590	.99641060

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 120

	.33	.34	.35	.36	.37	.38	.39	.40
71	.00000001	.00000005	.00000018	.00000056	.0000164	.0000455	.0001181	.0002892
72	.00000001	.00000005	.00000007	.00000024	.0000075	.0000212	.0000581	.0001480
73		.00000001	.00000003	.00000010	.0000033	.0000098	.0000277	.0000735
74			.00000001	.00000004	.0000014	.0000044	.0000128	.0000355
75				.00000002	.0000006	.0000019	.0000058	.0000166
76				.00000001	.0000002	.0000008	.0000025	.0000075
77					.0000001	.0000003	.0000011	.0000033
78						.0000001	.0000004	.0000014
79							.0000002	.0000006
80							.0000001	.0000002
81								.0000001

	.41	.42	.43	.44	.45	.46	.47	.48
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
14	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
15	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
16	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
17	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
18	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
19	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
20	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
21	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
22	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
23	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
24	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
25	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
26	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
27	.99999994	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
28	.99999985	.99999995	.99999998	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
29	.99999971	.99999987	.99999995	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
30	.99999954	.99999965	.99999988	.99999996	.99999999	1.00000000	1.00000000	1.00000000
31	.99999774	.99999915	.99999970	.99999990	.99999997	.99999999	1.00000000	1.00000000
32	.99999488	.99999800	.99999925	.99999973	.99999991	.99999997	.99999999	1.00000000
33	.99999084	.99999547	.99999824	.99999915	.99999977	.99999992	.99999997	.99999999
34	.99997565	.99994015	.99996033	.99998847	.99999943	.99999980	.99999993	.99999998
35	.99995247	.99991938	.99993135	.99996533	.99998657	.99999951	.99999983	.99999994
36	.99990873	.99985843	.99981888	.99979245	.99976699	.99974886	.99973586	.99972563
37	.99982944	.99979333	.99976342	.99973816	.99971455	.99969241	.99967178	.99965265
38	.99972836	.99969826	.99967279	.99964977	.99962823	.99960843	.99959022	.99957357
39	.99960434	.99957629	.99955074	.99952750	.99950659	.99948798	.99947167	.99945758
40	.99946640	.99943917	.99941375	.99939026	.99936873	.99934911	.99933138	.99931553
41	.9993276	.99930239	.99927860	.99925628	.99923545	.99921612	.99919829	.99918196
42	.99918909	.99916501	.99914233	.99912105	.99910118	.99908271	.99906563	.99904994
43	.99904746	.99902432	.99900261	.99898233	.99896346	.99894599	.99892982	.99891494
44	.99890679	.99888417	.99886299	.99884323	.99882489	.99880796	.99879243	.99877830
45	.99875091	.99872877	.99870808	.99868883	.99867099	.99865455	.99863951	.99862586
46	.99858160	.99856046	.99854077	.99852250	.99850563	.99849015	.99847605	.99846333
47	.99842805	.99840791	.99838920	.99837190	.99835600	.99834149	.99832836	.99831661
48	.99828031	.99826165	.99824443	.99822863	.99821423	.99820122	.99818959	.99817933
49	.99813831	.99812077	.99810473	.99808917	.99807500	.99806220	.99805076	.99804068
50	.99809235	.99807589	.99806050	.99804617	.99803289	.99802066	.99800948	.99799935
51	.99795247	.99793717	.99792296	.99790983	.99789777	.99788678	.99787685	.99786798
52	.99792805	.99791384	.99790071	.99788865	.99787764	.99786767	.99785873	.99785084
53	.99789924	.99788599	.99787379	.99786263	.99785250	.99784340	.99783532	.99782825
54	.99786640	.99785391	.99784243	.99783195	.99782247	.99781399	.99780651	.99779903
55	.99782944	.99781765	.99780686	.99779705	.99778822	.99778037	.99777350	.99776761
56	.99778809	.99777699	.99776690	.99775779	.99774966	.99774250	.99773631	.99773108
57	.99774361	.99773319	.99772386	.99771561	.99770843	.99770223	.99769699	.99769271
58	.99769565	.99768621	.99767784	.99767054	.99766430	.99765901	.99765467	.99765128
59	.99764361	.99763505	.99762746	.99762083	.99761515	.99761042	.99760664	.99760380
60	.99758761	.99757983	.99757294	.99756694	.99756182	.99755757	.99755418	.99755164
61	.99752761	.99752051	.99751429	.99750894	.99750445	.99750082	.99749804	.99749611
62	.99746361	.99745729	.99745184	.99744725	.99744352	.99744064	.99743861	.99743743
63	.99741561	.99740999	.99740526	.99740141	.99739843	.99739630	.99739501	.99739456
64	.99736361	.99735869	.99735466	.99735151	.99734923	.99734780	.99734722	.99734749
65	.99731761	.99731337	.99730991	.99730722	.99730539	.99730441	.99730428	.99730490
66	.99726761	.99726405	.99726126	.99725923	.99725795	.99725742	.99725764	.99725869
67	.99721361	.99721071	.99720857	.99720718	.99720654	.99720665	.99720749	.99720907
68	.99715561	.99715337	.99715188	.99715114	.99715125	.99715216	.99715389	.99715633
69	.99709361	.99709205	.99709126	.99709126	.99709205	.99709372	.99709627	.99709971
70	.99702761	.99702699	.99702719	.99702868	.99703137	.99703525	.99704032	.99704657
71	.99695761	.99695799	.99695926	.99696141	.99696443	.99696832	.99697307	.99697868
72	.99688361	.99688499	.99688714	.99689016	.99689405	.99689880	.99690441	.99691087
73	.99680561	.99680799	.99681114	.99681516	.99682005	.99682580	.99683241	.99683987
74	.99672361	.99672699	.99673114	.99673616	.99674205	.99674880	.99675641	.99676487
75	.99663761	.99664199	.99664714	.99665316	.99666005	.99666780	.99667641	.99668587
76	.99654761	.99655299	.99655914	.99656616	.99657405	.99658280	.99659241	.99660287
77	.99645361	.99645999	.99646714	.99647516	.99648405	.99649380	.99650441	.99651587
78	.99635561	.99636299	.99637114	.99638016	.99639005	.99640080	.99641241	.99642487
79	.99625361	.99626199	.99627114	.99628116	.99629205	.99630380	.99631641	.99632987
80	.99614761	.99615699	.99616714	.99617816	.99619005	.99620280	.99621641	.99623087
81	.99603761	.99604799	.99605914	.99607116	.99608405	.99609780	.99611241	.99612787

AMCP 706-109

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 120

	.41	.42	.43	.44	.45	.46	.47	.48
82	.00000001	.00000004	.00000013	.00000039	.0000110	.00000297	.00000757	.0001837
83		.00000008	.00000005	.00000017	.0000049	.0000134	.0000348	.0000911
84		.00000001	.00000002	.00000007	.0000021	.0000061	.0000167	.0000437
85			.00000001	.00000003	.0000009	.0000026	.0000075	.0000203
86				.00000001	.0000003	.0000011	.0000038	.0000091
87					.0000001	.00000074	.00000213	.00000540
88						.00000022	.00000066	.0000017
89						.00000007	.00000022	.0000007
90							.00000001	.00000003
91								.00000001

	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	1.00000000	1.00000000
19	1.00000000	1.00000000
20	1.00000000	1.00000000
21	1.00000000	1.00000000
22	1.00000000	1.00000000
23	1.00000000	1.00000000
24	1.00000000	1.00000000
25	1.00000000	1.00000000
26	1.00000000	1.00000000
27	1.00000000	1.00000000
28	1.00000000	1.00000000
29	1.00000000	1.00000000
30	1.00000000	1.00000000
31	1.00000000	1.00000000
32	1.00000000	1.00000000
33	1.00000000	1.00000000
34	.99999999	.99999999
35	.99999998	.99999999
36	.99999995	.99999999
37	.99999988	.99999996
38	.99999970	.99999990
39	.99999930	.99999975
40	.99999841	.99999942
41	.99999650	.99999847
42	.99999257	.99999706
43	.99998475	.99999373
44	.99996971	.99998707
45	.99994181	.99997421
46	.99989176	.99995020
47	.99980499	.99990488
48	.99965956	.99983129
49	.99943375	.99970374
50	.99913387	.99949549
51	.99849236	.99916446
52	.99764787	.99866324
53	.99649341	.99791809
54	.99487615	.99684956
55	.99271805	.99536550
56	.98988288	.9936076
57	.98643423	.99076587
58	.98193378	.98747801
59	.97720645	.98345321
60	.97158132	.97867803
61	.96523981	.97318656
62	.95851207	.96706494
63	.95158688	.96044963
64	.94449604	.95351350
65	.93763536	.94648070
66	.93114515	.93955037
67	.92519889	.93293506
68	.91979083	.92681344
69	.91483971	.92132197
70	.91039004	.91654679
71	.90644318	.91252199
72	.90308117	.90928413
73	.90017895	.90633124
74	.89762115	.90363450
75	.89535156	.90115044
76	.89328082	.9008191
77	.89133142	.90133476
78	.88943983	.90183354
79	.88760665	.90230451
80	.88583586	.9027526

AMCP 706-109

$$P(c, n, r) = \sum_{i=0}^n \binom{n}{i} p^i (1-p)^{n-i}$$

n = 120

	.49	.50
81	.0007971	.0016871
82	.0004538	.0004318
83	.0002183	.0004980
84	.0001089	.0003379
85	.0000585	.0001293
86	.0000245	.0000627
87	.0000111	.0000394
88	.0000048	.0000133
89	.0000020	.0000058
90	.0000008	.0000025
91	.0000003	.0000010
92	.0000001	.0000004
93		.0000002
94		.0000001

AMCP 706-109

$$P(n, r, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 129

N	.01	.02	.03	.04	.05	.06	.07	.08
1	.7335108	.9861817	.9903413	.9948360	.9986683	.9996584	.9999140	.9999787
2	.3701468	.7310479	.9019004	.9670793	.9895803	.9968458	.9990794	.9997396
3	.1397620	.4780149	.7466627	.8930615	.9580984	.9835561	.9925058	.9964092
4	.0418576	.2587204	.5414015	.7685023	.8900373	.9513094	.9833473	.9935115
5	.0099131	.1177454	.3453790	.5911453	.7779914	.8918857	.9518718	.9800963
6	.0019078	.0458194	.1928687	.4126444	.6891341	.7922735	.8947136	.9509384
7	.0003454	.0154838	.0944046	.3509370	.6474018	.8600700	.9038008	.9585882
8	.0000581	.0046046	.0412307	.1464512	.3178299	.5114905	.6882065	.8184480
9	.0000070	.0012190	.0161365	.0748941	.1977700	.3700307	.5532860	.7132480
10	.0000008	.0002900	.0057063	.0348363	.1123303	.2445198	.4166328	.5681001
11	.0000001	.0000685	.0018353	.0140003	.0591786	.1586200	.3293833	.4585534
12		.0000123	.0005401	.0087803	.0286308	.0875073	.1927979	.3366878
13		.0000022	.0001468	.0020813	.0128206	.0466375	.1184438	.2348337
14		.0000004	.0000694	.0008941	.0053316	.0231591	.0880738	.1509297
15		.0000001	.0000085	.0002153	.0020658	.0107419	.0366599	.0921754
16			.0000018	.0000683	.0007480	.0046654	.0185386	.0530039
17			.0000004	.0000169	.0002510	.0019019	.0088110	.0287346
18			.0000001	.0000043	.0000809	.0007894	.0039478	.0147068
19				.0000010	.0000243	.0003637	.0016893	.0071169
20				.0000002	.0000069	.0000901	.0006676	.0032611
21					.0000018	.0000029	.0000352	.0014171
22					.0000005	.0000008	.0000090	.0005048
23					.0000001	.0000002	.0000011	.0000295
24						.0000007	.0000010	.0000057
25						.0000002	.0000003	.0000005
26							.0000009	.0000104
27							.0000003	.0000034
28							.0000001	.0000010
29								.0000003
30								.0000001
N	.09	.10	.11	.12	.13	.14	.15	.16
1	.9999940	.9999987	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
2	.9999284	.9999808	.9999950	.9999997	.9999999	.9999999	1.0000000	1.0000000
3	.9995081	.9999533	.9999977	.9999988	.9999996	.9999999	.9999998	.9999999
4	.9977486	.9992535	.9997623	.9999271	.9999784	.9999938	.9999983	.9999995
5	.9928670	.9971849	.9990018	.9996645	.9998918	.9999663	.9999899	.9999971
6	.9787136	.9913238	.9966531	.9987705	.9995603	.9998546	.9999529	.9999853
7	.9510111	.9777331	.9906500	.9962503	.9985695	.9994787	.9998180	.9999389
8	.9038687	.9517885	.9776150	.9902116	.9955469	.9984035	.9993995	.9997814
9	.8302584	.9074845	.9530463	.9776543	.9899707	.9957343	.9986738	.9993318
10	.7337105	.8411145	.9122212	.9546328	.9779648	.9898988	.9956088	.9981792
11	.6191063	.7530811	.8514715	.9169596	.9564370	.9784801	.9899464	.9955416
12	.4965291	.6470028	.7707118	.8613849	.9216172	.9563821	.9771478	.9891066
13	.3771000	.5111444	.6723170	.7868642	.8705041	.9262096	.9604093	.9799866
14	.2711730	.4152659	.5688666	.6954070	.8017340	.8790732	.9362477	.9624753
15	.1848058	.3085441	.4507810	.5920723	.7166011	.8185493	.8871311	.9349331
16	.1102632	.2177070	.3445723	.4840405	.6190677	.7361179	.8088556	.8947126
17	.0717955	.1457627	.2510433	.3790778	.5152383	.6441109	.7548883	.8401078
18	.0412476	.0923273	.1742048	.2859378	.4120909	.5445126	.6671395	.7710175
19	.0224489	.0558917	.1151130	.2032139	.3161982	.4416336	.5780455	.6891091
20	.0115272	.0320458	.0724453	.1380034	.2324879	.3476936	.4737455	.5979629
21	.0055789	.0174733	.0434408	.0906713	.1626215	.2617938	.3703368	.5024764
22	.0026459	.0090621	.0246739	.0535310	.1103310	.1892119	.2909455	.4068072
23	.0011734	.0044050	.0135443	.0336801	.0711937	.1312076	.2153376	.3197887
24	.0004958	.0021154	.0070530	.0191825	.0439853	.0872792	.1530036	.2415768
25	.0001999	.0009326	.0035094	.0104509	.0260988	.0556951	.1046399	.1757711
26	.0000770	.0004099	.0016700	.0055208	.0147596	.0341003	.0607347	.1231365
27	.0000283	.0001687	.0007606	.0027225	.0080340	.0200386	.0433898	.0830163
28	.0000100	.0000665	.0003318	.0011035	.0041845	.0113061	.0263275	.0578710
29	.0000034	.0000251	.0001388	.0005986	.0020945	.0061275	.0155590	.036478
30	.0000011	.0000091	.0000557	.0002199	.0008068	.0031914	.0086176	.0203320
31	.0000003	.0000032	.0000215	.0001117	.0004651	.0015983	.0046521	.0127140
32	.0000001	.0000011	.0000029	.0000455	.0002066	.0007699	.0024173	.0065326
33		.0000003	.0000028	.0000178	.0000883	.0003570	.0012095	.0035101
34		.0000001	.0000010	.0000030	.0000177	.0000863	.0003594	.0011817
35			.0000003	.0000024	.0000144	.0000686	.0002708	.0009078
36			.0000001	.0000008	.0000055	.0000284	.0001213	.0004378
37			.0000003	.0000003	.0000020	.0000114	.0000534	.0002032
38			.0000001	.0000001	.0000007	.0000044	.0000219	.0000913
39				.0000002	.0000002	.0000016	.0000088	.0000345
40				.0000001	.0000001	.0000006	.0000034	.0000165
41					.0000003	.0000003	.0000013	.0000067
42					.0000001	.0000001	.0000005	.0000026
43						.0000002	.0000002	.0000010
44						.0000001	.0000001	.0000004
45							.0000001	.0000001
N	.17	.18	.19	.20	.21	.22	.23	.24
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	.9999992	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	.9999954	.9999987	.9999996	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
7	.9999903	.9999979	.9999988	.9999995	.9999998	1.0000000	1.0000000	1.0000000
8	.9999853	.9999971	.9999980	.9999993	.9999997	.9999999	1.0000000	1.0000000
9	.9999804	.9999965	.9999973	.9999986	.9999996	.9999999	.9999999	.9999999
10	.9999753	.9999957	.9999963	.9999982	.9999995	.9999998	.9999999	.9999999
11	.9998117	.9999409	.9999701	.9999916	.9999915	.9999986	.9999997	.9999998
12	.9995545	.9998849	.9999214	.9999617	.9999840	.9999981	.9999994	.9999999
13	.9993507	.9995896	.9998783	.9999202	.9999814	.9999978	.9999995	.9999999
14	.9990789	.9996539	.9998000	.9998944	.9999667	.9999975	.9999994	.9999999
15	.9984548	.9991637	.9998185	.9999037	.9999898	.9999927	.9999994	.9999999

$$F(n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 100

	.17	.18	.19	.20	.21	.22	.23	.24
16	.9390540	.9666042	.9826354	.9914131	.9959535	.9981796	.9992169	.9996775
17	.9018491	.9430038	.9686247	.9835925	.9918329	.9961235	.9982426	.9992380
18	.8511966	.9085683	.9467795	.9705965	.9845520	.9922687	.9963082	.9983154
19	.7866435	.8615344	.9148957	.9503804	.9725043	.9855035	.9927128	.9965031
20	.7094008	.8012176	.8712031	.9208543	.9534075	.9743561	.9864380	.9931592
21	.6223865	.7283959	.8148343	.8802559	.9264649	.9570633	.9761314	.9873515
22	.5298808	.6454250	.7462041	.8275747	.8887391	.9317469	.9601510	.9778321
23	.4368684	.5560150	.6671754	.7629204	.8395089	.8966936	.9367180	.9630746
24	.3487411	.4647088	.5809353	.6877247	.7786282	.8506982	.9041552	.9413944
25	.2680673	.3711863	.4615898	.5406962	.6071511	.6634006	.7101193	.7471562
26	.1990984	.2945729	.3735680	.4375162	.4873501	.5255249	.5530284	.5705080
27	.1425938	.2229123	.2899796	.3430362	.3824985	.4089472	.4240996	.4303913
28	.0984441	.1629039	.2170768	.2617923	.2971923	.3237000	.3418850	.3522887
29	.0655027	.1149180	.1639271	.2114719	.2575919	.2932635	.3198926	.3381574
30	.0420045	.0782324	.1132373	.1470430	.1795919	.2108305	.2308348	.2405440
31	.0259815	.0513893	.0719996	.0906023	.1076406	.1235439	.1383951	.1506663
32	.0154678	.0318571	.0467825	.0607380	.0739615	.0856178	.0959466	.1044892
33	.0088855	.0199215	.0300756	.0400754	.0495449	.0582700	.0661850	.0732887
34	.0049227	.0117591	.0251090	.0404762	.0585470	.0798509	.1035206	.1285847
35	.0026310	.0067001	.0151964	.0310559	.0577879	.0986363	.1560825	.2302327
36	.0013569	.0036858	.0080853	.0192351	.0377802	.0679375	.1127570	.1740029
37	.0006755	.0019198	.0045198	.0115125	.0239658	.0452920	.0780456	.1276331
38	.0003247	.0009049	.0022407	.0066698	.0146174	.0292377	.0535953	.0908078
39	.0001508	.0004983	.0014465	.0037350	.0086718	.0182749	.0352483	.0626880
40	.0000676	.0002388	.0007381	.0020230	.0049717	.0110601	.0224610	.0419536
41	.0000293	.0001106	.0003642	.0010601	.0027586	.0064814	.0138669	.0272213
42	.0000123	.0000495	.0001738	.0005375	.0014016	.0036781	.0082955	.0172224
43	.0000050	.0000215	.0000803	.0002637	.0007703	.0020214	.0048070	.0104404
44	.0000020	.0000099	.0000359	.0001253	.0003878	.0010760	.0026993	.0061711
45	.0000007	.0000037	.0000155	.0000576	.0001841	.0005548	.0014688	.0035360
46	.0000003	.0000014	.0000065	.0000256	.0000803	.0002772	.0007746	.0019642
47	.0000001	.0000005	.0000026	.0000111	.0000408	.0001342	.0003959	.0010578
48		.0000002	.0000010	.0000046	.0000181	.0000629	.0001961	.0005523
49		.0000001	.0000004	.0000019	.0000078	.0000286	.0000942	.0002796
50			.0000001	.0000007	.0000032	.0000126	.0000438	.0001373
51			.0000001	.0000003	.0000013	.0000054	.0000198	.0000654
52				.0000001	.0000005	.0000023	.0000087	.0000302
53					.0000002	.0000009	.0000037	.0000135
54					.0000001	.0000003	.0000015	.0000059
55						.0000001	.0000006	.0000025
56							.0000002	.0000010
57							.0000001	.0000004
58								.0000002
59								.0000001

	.25	.26	.27	.28	.29	.30	.31	.32
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	.9999996	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	.9999984	.9999995	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13	.9999947	.9999983	.9999995	.9999998	1.0000000	1.0000000	1.0000000	1.0000000
14	.9999834	.9999943	.9999981	.9999994	.9999998	.9999999	1.0000000	1.0000000
15	.9999523	.9999828	.9999940	.9999980	.9999994	.9999998	.9999999	1.0000000
16	.9998727	.9999518	.9999824	.9999939	.9999979	.9999993	.9999999	.9999999
17	.9996836	.9998741	.9999519	.9999824	.9999938	.9999979	.9999993	.9999999
18	.9992648	.9996926	.9998758	.9999526	.9999825	.9999938	.9999979	.9999993
19	.9983960	.9992960	.9997040	.9998522	.9999539	.9999829	.9999939	.9999979
20	.9967043	.9984818	.9993306	.9997173	.9998853	.9999555	.9999834	.9999941
21	.9936027	.9969084	.9985711	.9993677	.9997320	.9998911	.9999576	.9999841
22	.9882366	.9940392	.9971129	.9986622	.9994065	.9997477	.9998972	.9999598
23	.9794556	.9890902	.9944632	.9973152	.9987538	.9994461	.9997641	.9998907
24	.9658387	.9810008	.9899025	.9944783	.9975135	.9988447	.9994860	.9997869
25	.9457915	.9684478	.9824675	.9906926	.9952762	.9977064	.9988340	.9995256
26	.9177256	.9499235	.9709069	.9838560	.9914380	.9956574	.9979925	.9990209
27	.8803043	.9238894	.9538036	.9732213	.9851671	.9921449	.9960309	.9980710
28	.8327192	.8889948	.9296715	.9574444	.9753961	.9864022	.9928135	.9963657
29	.7749373	.8443325	.8971569	.9350937	.9608576	.9774366	.9875629	.9934423
30	.7078573	.7896805	.8552735	.9048218	.9401760	.9640544	.9793479	.9886511
31	.6333237	.7236736	.8036363	.8655804	.9120179	.9449369	.9670453	.9811354
32	.5539816	.6531622	.7435573	.8148452	.8777124	.9249388	.9573627	.9753627
33	.4729865	.5765755	.6735573	.7588028	.8293441	.8844296	.9251069	.9536277
34	.3916277	.4967652	.5984482	.6924548	.7741835	.8411676	.8930337	.9310462
35	.3189371	.4175893	.5200104	.6160200	.7015683	.7788169	.8452347	.9011283
36	.2513599	.3420818	.4412656	.5427019	.6400412	.7279192	.8027323	.8629137
37	.1925427	.2728099	.3652175	.4646150	.5648233	.6597717	.7445282	.8159573
38	.1432634	.2116340	.2945190	.3882869	.4876012	.5863619	.6788008	.7604159
39	.1034941	.1595954	.2312115	.3164223	.4112337	.5101924	.6073077	.6971365
40	.0728565	.1169331	.1765762	.2512119	.3384593	.4349228	.5323609	.6276532
41	.0493637	.0832068	.1311091	.1941519	.2715750	.3605735	.4554082	.5540827
42	.0325777	.0574841	.0946049	.1459851	.2122729	.2922428	.3827126	.4789289
43	.0208541	.0385480	.0663159	.1067373	.1615220	.2308845	.3131601	.4048277
44	.0129474	.0250868	.0458146	.0758562	.1159515	.1776801	.2499369	.3342744
45	.0077962	.0158425	.0298427	.0523835	.0860989	.1331129	.1944188	.2693804
46	.0045528	.0097075	.0191511	.0351412	.0602665	.0970741	.1473044	.2116969
47	.0025795	.0057712	.0119299	.0228967	.0409990	.0687994	.1086509	.1621374
48	.0014164	.0033289	.0072134	.014876	.0271012	.0474299	.0779833	.1209333
49	.0007546	.0018630	.0042332	.0090111	.0174037	.0317844	.0544455	.0878164
50	.0003899	.0010115	.0024111	.0053097	.0108540	.0207003	.0369644	.0620545

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$$P(r, n, p) = \sum_{i=0}^n \binom{n}{i} p^i (1-p)^{n-i}$$

n = 129

X	.25	.26	.27	.28	.29	.30	.31	.32
51	.0001554	.0005329	.0013328	.0030750	.0065770	.0130997	.0243983	.0426572
52	.0000050	.0002724	.0007151	.0017289	.0038696	.0080540	.0156531	.0285176
53	.0000048	.0001351	.0003723	.0009437	.0022109	.0048103	.0097596	.0185367
54	.0000205	.0000650	.0001881	.0005000	.0012266	.0027926	.0054120	.0117129
55	.0000091	.0000304	.0000923	.0002572	.0006608	.0015724	.0034804	.0071934
56	.0000039	.0000138	.0000439	.0001284	.0003456	.0008605	.0019902	.0042932
57	.0000016	.0000061	.0000203	.0000622	.0001755	.0004573	.0011055	.0024897
58	.0000007	.0000026	.0000091	.0000293	.0000865	.0002360	.0005965	.0014028
59	.0000003	.0000011	.0000040	.0000134	.0000414	.0001183	.0003126	.0007678
60	.0000001	.0000004	.0000017	.0000059	.0000193	.0000576	.0001591	.0004082
61		.0000002	.0000007	.0000026	.0000087	.0000272	.0000786	.0002108
62		.0000001	.0000003	.0000011	.0000038	.0000125	.0000377	.0001057
63			.0000001	.0000004	.0000016	.0000056	.0000176	.0000515
64				.0000002	.0000007	.0000024	.0000080	.0000244
65				.0000001	.0000003	.0000010	.0000035	.0000112
66					.0000001	.0000002	.0000006	.0000022
67						.0000001	.0000002	.0000009
68							.0000001	.0000004
69								.0000001
70								.0000001
71								.0000001
X	.33	.34	.35	.36	.37	.38	.39	.40
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
14	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
15	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
16	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
17	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
18	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
19	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
20	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
21	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
22	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
23	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
24	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
25	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
26	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
27	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
28	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
29	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
30	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
31	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
32	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
33	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
34	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
35	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
36	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
37	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
38	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
39	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
40	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
41	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
42	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
43	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
44	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
45	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
46	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
47	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
48	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
49	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
50	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
51	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
52	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
53	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
54	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
55	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
56	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
57	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
58	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
59	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
60	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
61	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
62	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
63	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
64	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
65	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
66	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
67	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
68	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
69	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
70	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999

$$P(n, m, p) = \sum_{i=0}^m \binom{m}{i} p^i (1-p)^{m-i}$$

N	.33	.34	.35	.36	.37	.38	.39	.40
71	.00000002	.00000008	.00000026	.00000080	.00000234	.00000636	.00001629	.00003924
72	.00000001	.00000003	.00000011	.00000036	.00000108	.00000306	.00000796	.00001811
73		.00000001	.00000005	.00000015	.00000048	.00000143	.00000396	.00000911
74			.00000002	.00000006	.00000021	.00000065	.00000187	.00000507
75			.00000001	.00000003	.00000009	.00000028	.00000075	.00000204
76				.00000001	.00000004	.00000012	.00000031	.00000077
77				.00000001	.00000001	.00000002	.00000005	.00000011
78					.00000001	.00000001	.00000001	.00000002
79						.00000001	.00000001	.00000001
80							.00000001	.00000001
81								.00000001
82								.00000001
N	.41	.42	.43	.44	.45	.46	.47	.48
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
14	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
15	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
16	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
17	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
18	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
19	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
20	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
21	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
22	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
23	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
24	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
25	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
26	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
27	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
28	.99999999	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
29	.99999999	.99999999	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
30	.99999999	.99999999	.99999999	.99999999	.99999999	1.00000000	1.00000000	1.00000000
31	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	1.00000000	1.00000000
32	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	1.00000000
33	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
34	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
35	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
36	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
37	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
38	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
39	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
40	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
41	.98764667	.99330668	.99653116	.99820118	.99910666	.99963223	.99994411	.99999347
42	.98014299	.98895277	.99405877	.99644447	.99849866	.99949866	.99999522	.99999950
43	.96972577	.98234674	.99014099	.99474118	.99711800	.99869336	.99939222	.99977002
44	.95478881	.97266774	.98410339	.99124449	.99536663	.99765666	.99886883	.99947885
45	.93449922	.95896822	.97838722	.99057115	.99224336	.99593302	.99796603	.99902431
46	.90786677	.94023022	.96285522	.97789667	.98741777	.99315222	.99643393	.99823231
47	.87407729	.91545222	.94545444	.96645444	.98020733	.98883308	.99397622	.99688777
48	.83260022	.88376622	.92830000	.96077813	.98078933	.98823301	.99011721	.99172114
49	.78336611	.84456444	.89203332	.92976681	.95522778	.97286977	.98427555	.99128999
50	.72690000	.79764669	.85596223	.90158097	.93553333	.95954885	.97570954	.98605330
51	.66392511	.74328226	.81133778	.86679441	.90975114	.94139188	.96355553	.97832006
52	.59623466	.68230221	.75919114	.82444447	.87707559	.91743335	.94688597	.96726331
53	.52567599	.61606444	.70018337	.77453330	.83697741	.88682200	.92465114	.95195266
54	.45444022	.54637994	.63551115	.71755833	.78933060	.84893330	.89603391	.93142002
55	.38476697	.47535993	.56684772	.65455445	.73441555	.80355100	.86032887	.90474456
56	.31874991	.40522998	.49621117	.58705005	.67317440	.75074661	.81714454	.87116692
57	.25812336	.33812330	.42579775	.51696663	.60696616	.69135117	.76654419	.83021334
58	.20416022	.27588779	.35776779	.44663371	.53750111	.62655443	.70970770	.78179000
59	.15762334	.21994229	.29405884	.37764770	.46711332	.55603320	.64580376	.72633150
60	.11870001	.17119113	.24022222	.31260664	.39773310	.48779319	.57828036	.66468656
61	.08714336	.13000447	.18533966	.25290849	.33150226	.41798227	.50843365	.59831554
62	.06233866	.09626883	.14108132	.19999599	.27020492	.35071774	.43836891	.52901599
63	.04311533	.06997444	.10594444	.15133225	.20720770	.27307723	.34722009	.42588523
64	.02946111	.04884001	.07711112	.11617661	.16734779	.23093885	.30593391	.38998223
65	.01944886	.03343310	.05468002	.08525992	.12696668	.18092337	.24717448	.32441993
66	.01249006	.02227277	.03775885	.06009674	.09392777	.13833185	.19505531	.26364995
67	.00780199	.01443774	.02537992	.04285993	.06771488	.10112550	.15203779	.22077089
68	.00473322	.00910233	.01659992	.02788544	.04754884	.07493352	.11028889	.16270889
69	.00279711	.00557998	.01055995	.01989897	.03250444	.05304005	.08264007	.12331362
70	.00160445	.00332448	.00659316	.01218544	.02162228	.03655519	.05895503	.09084228
71	.00089442	.00192511	.00392771	.00760229	.01399915	.02451226	.04094430	.06529220
72	.00048440	.00100229	.00202543	.00401099	.00880031	.01529033	.02767739	.04569228
73	.00025444	.00050116	.00100221	.00202141	.00401553	.00810421	.01519339	.02711191
74	.00012998	.00026138	.00051777	.00103553	.00207177	.00414322	.00828522	.01560150
75	.00006443	.00012616	.00025240	.00050485	.00100971	.00201942	.00403884	.00807774
76	.00003309	.00006607	.00013214	.00026428	.00052856	.00105712	.00211424	.00422848
77	.00001654	.00003309	.00006618	.00013236	.00026472	.00052944	.00105888	.00211791
78	.00000827	.00001654	.00003309	.00006618	.00013236	.00026472	.00052944	.00105888
79	.00000413	.00000827	.00001654	.00003309	.00006618	.00013236	.00026472	.00052944
80	.00000206	.00000413	.00000827	.00001654	.00003309	.00006618	.00013236	.00026472
81	.00000103	.00000206	.00000413	.00000827	.00001654	.00003309	.00006618	.00013236

AMCP 706-109

$$P(c, r, r) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 129

X	.41	.42	.43	.44	.45	.46	.47	.48
82	.00000002	.00000007	.00000021	.00000061	.00000169	.00000447	.00001123	.00002677
83	.00000001	.00000003	.00000009	.00000026	.00000076	.00000210	.00000547	.00001353
84		.00000001	.00000003	.00000011	.00000033	.00000095	.00000258	.00000665
85			.00000001	.00000005	.00000014	.00000042	.00000118	.00000316
86			.00000001	.00000003	.00000006	.00000018	.00000052	.00000145
87				.00000001	.00000002	.00000007	.00000022	.00000064
88					.00000001	.00000003	.00000009	.00000028
89						.00000001	.00000004	.00000011
90							.00000001	.00000005
91							.00000001	.00000002
92								.00000001

X	.49	.50
21	1.00000000	1.00000000
22	1.00000000	1.00000000
23	1.00000000	1.00000000
24	1.00000000	1.00000000
25	1.00000000	1.00000000
26	1.00000000	1.00000000
27	1.00000000	1.00000000
28	1.00000000	1.00000000
29	1.00000000	1.00000000
30	1.00000000	1.00000000
31	1.00000000	1.00000000
32	1.00000000	1.00000000
33	1.00000000	1.00000000
34	1.00000000	1.00000000
35	1.00000000	1.00000000
36	.99999997	.99999999
37	.99999992	.99999997
38	.99999979	.99999993
39	.99999950	.99999983
40	.99999885	.99999959
41	.99999744	.99999904
42	.99999450	.99999786
43	.99998858	.99999540
44	.99997708	.99999040
45	.99995548	.99998064
46	.99991628	.99996221
47	.99984751	.99992854
48	.99973082	.99985088
49	.99953930	.99974752
50	.99933511	.99959962
51	.9876750	.9933098
52	.9807157	.9891485
53	.9706840	.9829056
54	.9566861	.9738382
55	.9377552	.9610753
56	.9129526	.9436713
57	.8814631	.9206731
58	.8427160	.8912194
59	.7965024	.8546561
60	.7430703	.8106562
61	.6831775	.7593229
62	.6180866	.7012515
63	.5494962	.6375728
64	.4794115	.5698447
65	.4099709	.5000000
66	.3432535	.4301553
67	.2810949	.3624272
68	.2249394	.2987423
69	.1757466	.2406771
70	.1339628	.1893438
71	.0995526	.1453439
72	.0720796	.1087806
73	.0508164	.0793269
74	.0348647	.0563287
75	.0232666	.0389247
76	.0150948	.0261618
77	.0093163	.0170934
78	.0058271	.0108513
79	.0034640	.0066902
80	.0019984	.0040038
81	.0011183	.0023248
82	.0006067	.0013092

AMCP 706-109

n = 122

$$F(c,0,p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

	.49	.50
83	.00031100	.00071146
84	.00016325	.00037779
85	.0000801	.0001936
86	.0000383	.0000960
87	.0000177	.0000460
88	.0000079	.0000214
89	.0000034	.0000096
90	.0000014	.0000041
91	.0000006	.0000017
92	.0000002	.0000007
93	.0000001	.0000003
94		.0000001

AMCP 706-109

$$P(e, n, r) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 120

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.7292457	.9276581	.9809311	.9950425	.9987292	.9996789	.9999201	.9999804
2	.1737098	.7357307	.9042684	.9681896	.9900344	.9970146	.9991378	.9997587
3	.0422427	.2631063	.7513201	.8962242	.9605180	.9860455	.9953401	.9986156
4	.0102365	.1205649	.4513197	.7677246	.9251722	.9831441	.9931441	.9979033
5	.0020769	.0472579	.1688422	.4197844	.6365663	.7982502	.9087146	.9533655
6	.0003619	.0160899	.0773406	.2550854	.4754864	.6687842	.8190347	.9202150
7	.0000551	.0048822	.0428162	.1509027	.3453085	.5823333	.7964381	.9246485
8	.0000074	.0012867	.0168890	.0777544	.2437813	.5266393	.7920746	.9207442
9	.0000009	.0003086	.0060192	.0364392	.1170777	.2543064	.4261943	.5980320
10								
11	.0000001	.0000067	.0019514	.0156095	.0610612	.1582799	.3018945	.4689174
12		.0000133	.0005790	.0061411	.0301579	.0914142	.1998101	.3464371
13		.0000024	.0001581	.0022294	.0136111	.0490897	.1236477	.2400800
14		.0000004	.0000399	.0007496	.0057061	.0245678	.0715991	.1574567
15		.0000001	.0000093	.0002344	.0022291	.0114869	.0388589	.0968760
16			.0000020	.0000684	.0008139	.0050300	.0108015	.0561376
17			.0000004	.0000187	.0002785	.0020677	.0094915	.0306761
18			.0000001	.0000048	.0000896	.0007998	.0042877	.0158290
19				.0000012	.0000271	.0002917	.0018887	.0077241
20				.0000003	.0000078	.0001005	.0007377	.0035496
21				.0000001	.0000021	.0000328	.0002819	.0015646
22					.0000005	.0000101	.0001023	.0006514
23					.0000001	.0000030	.0000352	.0002579
24						.0000008	.0000144	.0000979
25						.0000002	.0000036	.0000350
26						.0000001	.0000011	.0000120
27							.0000003	.0000039
28							.0000001	.0000004
29								.0000001
30								
x	.09	.10	.11	.12	.13	.14	.15	.16
1	.9999953	.9999989	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
2	.9999934	.9999986	.9999995	.9999998	.9999997	.9999999	1.0000000	1.0000000
3	.9999540	.9998661	.9998618	.9998594	.9998592	.9998593	.9998598	1.0000000
4	.9997907	.9993135	.9992830	.9992544	.9992345	.9992193	.9992085	.9991926
5	.9927604	.9973641	.9990855	.9996562	.9999030	.9999703	.9999911	.9999975
6	.9790933	.9919059	.9969105	.9988778	.9996104	.9998703	.9999584	.9999872
7	.9535043	.9792712	.9813103	.9865528	.9885993	.9895314	.9900382	.9904464
8	.9072015	.9544026	.9776049	.9893644	.9952076	.9980541	.9992366	.9998306
9	.8367933	.9110194	.9557489	.9791613	.9907474	.9961080	.9984437	.9994053
10	.7423998	.8479320	.9167119	.9573940	.9795256	.9907102	.9960034	.9983639
11	.6294388	.7619044	.8583320	.9214803	.9598357	.9800778	.9907948	.9959637
12	.5075629	.6576287	.7796174	.8600539	.9261612	.9611958	.9807674	.9907742
13	.3880306	.5427322	.6831404	.7958067	.8771514	.9307137	.9632199	.9815554
14	.2807245	.4268537	.5749061	.7063819	.8106784	.8856723	.9351120	.9632675
15	.1920326	.3192523	.4631104	.6044724	.7276690	.8243949	.8936586	.9393398
16	.1241980	.2267947	.3562554	.4970043	.6317471	.7472520	.8370869	.9011479
17	.0759776	.1529571	.2613315	.3916733	.5288724	.6569903	.7653324	.8488614
18	.0439269	.0979408	.1826570	.2953546	.4254980	.5584556	.6804187	.7782052
19	.0241408	.0595653	.1216131	.2188999	.3286643	.4577557	.5863477	.7088145
20	.0125648	.0344304	.0771367	.1466206	.2433703	.3611252	.4884905	.6125463
21	.0062107	.0189306	.0466313	.0964592	.1726350	.2738198	.3986481	.5177542
22	.0029189	.0099095	.0268807	.0606296	.1172703	.1993733	.3040542	.4331771
23	.0013059	.0049434	.0147862	.0364224	.0762819	.1393282	.2265938	.3392923
24	.0005568	.0023524	.0077670	.0209222	.0475224	.0934292	.1694067	.2540923
25	.0002265	.0010688	.0038992	.0114967	.0286332	.0601168	.1119065	.1863000
26	.0000880	.0004642	.0018723	.0060503	.0162246	.0371236	.0741205	.1154496
27	.0000327	.0001928	.0008606	.0030498	.0088996	.0220072	.0471915	.0894339
28	.0000116	.0000767	.0003790	.0014738	.0046836	.0125286	.0288869	.0565343
29	.0000040	.0000292	.0001600	.0006832	.0023662	.0068525	.0170048	.0368835
30	.0000013	.0000107	.0000648	.0003041	.0011482	.0036024	.0096288	.0233785
31	.0000004	.0000038	.0000252	.0001300	.0005355	.0018212	.0052469	.0130769
32	.0000001	.0000013	.0000094	.0000534	.0002402	.0008859	.0027325	.0073616
33		.0000004	.0000034	.0000211	.0001036	.0004148	.0013907	.0039937
34		.0000001	.0000012	.0000080	.0000441	.0001870	.0006770	.0020886
35			.0000004	.0000029	.0000172	.0000813	.0003177	.0010834
36			.0000001	.0000010	.0000066	.0000340	.0001437	.0005125
37				.0000004	.0000028	.0000138	.0000627	.0002406
38				.0000001	.0000009	.0000054	.0000264	.0001091
39					.0000003	.0000020	.0000108	.0000478
40					.0000001	.0000007	.0000048	.0000208
41						.0000003	.0000016	.0000083
42						.0000001	.0000006	.0000033
43							.0000002	.0000013
44							.0000001	.0000008
45								.0000005
46								.0000001
x	.17	.18	.19	.20	.21	.22	.23	.24
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	.9999993	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	.9999962	.9999989	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
7	.9999829	.9999947	.9999984	.9999995	.9999999	1.0000000	1.0000000	1.0000000
8	.9999346	.9999785	.9999932	.9999979	.9999994	.9999998	1.0000000	1.0000000
9	.9997826	.9999238	.9999743	.9999917	.9999974	.9999992	.9999998	.9999999
10	.9993607	.9997610	.9999143	.9999765	.9999902	.9999969	.9999990	.9999997
11	.9983150	.9993886	.9997446	.9999084	.9999672	.9999889	.9999960	.9999989
12	.9959786	.9983930	.9993081	.9997117	.9999003	.9999644	.9999878	.9999980
13	.9912330	.9960386	.9982943	.9992205	.9997239	.9998959	.9999623	.9999869

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 130

	.17	.18	.19	.20	.21	.22	.23	.24
14	.9824103	.9915473	.9961357	.9983155	.9992985	.9997204	.9998932	.9999609
15	.9673084	.9833076	.9919042	.9962618	.9983533	.9993068	.9997207	.9998841
16	.9433880	.9693203	.9842282	.9932912	.9964104	.9984047	.9993222	.9997243
17	.9081739	.9472519	.9712868	.9851566	.9926982	.9965758	.9984667	.9993435
18	.8598075	.9147667	.9509301	.9731957	.9860810	.9931167	.9967531	.9985570
19	.7976175	.8700005	.9209537	.9544236	.9750383	.9869918	.9935396	.9969381
20	.7225321	.8180746	.8795047	.9267595	.9577349	.9768085	.9878818	.9938618
21	.6371790	.7415038	.8255443	.8883756	.9322069	.9600677	.9785022	.9887454
22	.5456067	.6603598	.7592438	.8381109	.8966616	.9373164	.9638299	.9804777
23	.4526805	.5721088	.6821909	.7758513	.8498473	.9044053	.9421074	.9666164
24	.3633078	.4811439	.5973209	.7027639	.7914131	.8608178	.9116446	.9465977
25	.2816968	.3921204	.5085655	.6213019	.7221613	.8060060	.8710768	.9184134
26	.2108231	.3092633	.4202922	.5349522	.6441084	.7404575	.8169980	.8806871
27	.1521924	.2358112	.3364714	.4477722	.5603173	.6657943	.7577909	.8319909
28	.1059495	.1737054	.2611184	.3638210	.4745229	.5846787	.6864110	.7740098
29	.0711088	.1235555	.1959255	.2866160	.3906289	.5005176	.6080571	.7060067
30	.0459992	.0846358	.1421394	.2187288	.3121911	.4170261	.5257382	.6304752
31	.0286888	.0562211	.0994638	.1615904	.2419943	.3377449	.4429560	.5501733
32	.0172517	.0355589	.0675237	.1155111	.1918011	.2856135	.3931909	.5083717
33	.0100045	.0221985	.0441999	.0798716	.1322988	.2026622	.2894795	.3884537
34	.0055564	.0132283	.0279526	.0534119	.0938210	.1499464	.2240936	.3135066
35	.0030206	.0076107	.0170798	.0345400	.0635854	.1075225	.1683733	.2459847
36	.0015735	.0042284	.0100844	.0215992	.0419776	.0747022	.1227219	.1874995
37	.0007913	.0022691	.0057542	.0113061	.0226820	.0450270	.0867376	.1387619
38	.0003843	.0011765	.0031738	.0076396	.0165840	.0327657	.0594305	.0966000
39	.0001803	.0005895	.0016924	.0043220	.0099246	.0206867	.0394681	.0649414
40	.0000818	.0002855	.0008727	.0023854	.0057487	.0126473	.0254021	.0469299
41	.0000358	.0001337	.0004352	.0012522	.0032233	.0074887	.0158435	.0307871
42	.0000152	.0000606	.0002100	.0006420	.0017498	.0042943	.0095761	.0193461
43	.0000065	.0000265	.0000981	.0003185	.0009197	.0023852	.0056091	.0120441
44	.0000025	.0000113	.0000443	.0001529	.0004681	.0012840	.0031841	.0071958
45	.0000009	.0000046	.0000194	.0000711	.0002308	.0006695	.0017518	.0041684
46	.0000004	.0000018	.0000082	.0000320	.0001102	.0003383	.0009342	.0023414
47	.0000001	.0000007	.0000034	.0000140	.0000519	.0001654	.0004830	.0012463
48		.0000003	.0000013	.0000059	.0000229	.0000786	.0002421	.0006736
49		.0000001	.0000005	.0000024	.0000099	.0000362	.0001176	.0003451
50			.0000002	.0000010	.0000042	.0000161	.0000554	.0001715
51			.0000001	.0000004	.0000017	.0000070	.0000253	.0000826
52				.0000001	.0000005	.0000029	.0000112	.0000386
53					.0000003	.0000018	.0000082	.0000275
54					.0000001	.0000005	.0000020	.0000077
55						.0000002	.0000005	.0000033
56						.0000001	.0000003	.0000014
57							.0000001	.0000005
58								.0000001
59								.0000001

	.25	.26	.27	.28	.29	.30	.31	.32
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	.9999997	.9999996	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13	.9999996	.9999996	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
14	.9999996	.9999995	.9999998	.9999999	.9999999	1.0000000	1.0000000	1.0000000
15	.9999996	.9999995	.9999995	.9999998	.9999999	.9999999	1.0000000	1.0000000
16	.9999996	.9999995	.9999995	.9999995	.9999998	.9999999	.9999999	1.0000000
17	.9999730	.9999843	.9999601	.9999856	.9999950	.9999993	.9999995	.9999998
18	.9999395	.9999739	.9999771	.9999610	.9999858	.9999950	.9999983	.9999995
19	.9998613	.9999391	.9999750	.9999608	.9999622	.9999862	.9999951	.9999984
20	.9971272	.9986935	.9994314	.9997630	.9999053	.9999637	.9999867	.9999953
21	.9943781	.9973175	.9987761	.9994656	.9997765	.9999104	.9999656	.9999873
22	.9893781	.9947832	.9973066	.9986597	.9995009	.9997907	.9999159	.9999876
23	.9816508	.9901769	.9951801	.9976923	.9989431	.9995366	.9998054	.9999317
24	.9692429	.9831041	.9911396	.9955606	.9978732	.9990251	.9995722	.9998808
25	.9508033	.9717116	.9844769	.9918646	.9959250	.9980479	.9991051	.9994073
26	.9247421	.9547398	.9740283	.9857703	.9925511	.9962731	.9982154	.9991824
27	.8894596	.9306583	.9584215	.9741990	.9869857	.9931987	.9966011	.9983750
28	.8446155	.8980674	.9361672	.9618619	.9782297	.9881250	.9938075	.9969114
29	.7893828	.8559447	.9059359	.9413519	.9650738	.9801263	.9891904	.9943778
30	.7246272	.8036906	.8665820	.9132979	.9461716	.9680690	.9818946	.9901843
31	.6519570	.7423154	.8175784	.8753480	.9201838	.9506722	.9708591	.9835404
32	.5738171	.6725272	.7591118	.8334910	.8859400	.9266212	.9548658	.9733449
33	.4932353	.5966679	.6922106	.7750547	.8426679	.8947322	.9326158	.9587715
34	.4134674	.5175159	.6167877	.7110322	.7901801	.8541462	.9029764	.9382514
35	.3376008	.4381750	.5411886	.6400008	.7290167	.8045221	.8649602	.9107020
36	.2682542	.3617137	.4625267	.5642339	.6604941	.7461885	.8181130	.8751424
37	.2078470	.2908208	.3857505	.4844793	.5866365	.6802160	.7625715	.8309344
38	.1558632	.2275397	.3136076	.4096587	.5099956	.6083849	.6991763	.7781829
39	.1134164	.1711254	.2483045	.3365444	.4333831	.5330432	.6294706	.7173859
40	.0802954	.1280253	.1913277	.2694709	.3559561	.4568737	.5555944	.6498879
41	.0551634	.0919756	.1433852	.2101294	.2909715	.3886084	.4800855	.5774253
42	.0367742	.0641720	.1044610	.1594721	.2294705	.3127420	.4056176	.5029711
43	.0237450	.0434714	.0739539	.1172266	.1762398	.2492920	.3347214	.4285401
44	.0149241	.0286867	.0508622	.0845039	.1217443	.1736415	.2395361	.3168514
45	.0090900	.0182460	.0339747	.0589559	.0938089	.1464831	.2162294	.2901465
46	.0053636	.0113025	.0220378	.0399691	.0677579	.1078881	.1619098	.2301556

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$$P(n, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 130

x	.25	.26	.27	.28	.29	.30	.31	.32
47	.0030721	.0067947	.0138797	.0263252	.0465866	.0772700	.1206335	.1779897
48	.0017069	.0039639	.0084868	.0168422	.0313115	.0532408	.0874203	.1341154
49	.0009200	.0020471	.0045078	.0094653	.00202160	.0364781	.0617488	.0941380
50	.0004811	.0012329	.0029031	.0063153	.0127549	.0240355	.0433835	.0702903
51	.0002441	.0006573	.0016240	.0037007	.0070179	.0133799	.0232738	.0410643
52	.0001201	.0003401	.0008819	.0021058	.0044548	.0085677	.0153648	.0274423
53	.0000574	.0001708	.0004649	.0011635	.0026920	.0057044	.0115866	.0217305
54	.0000266	.0000832	.0002379	.0006242	.0015121	.0033965	.0071053	.0130955
55	.0000120	.0000394	.0001182	.0003252	.0008249	.0019379	.0044245	.0086394
56	.0000052	.0000181	.0000570	.0001645	.0004370	.0010741	.0024522	.0052213
57	.0000022	.0000081	.0000267	.0000808	.0002249	.0005783	.0013798	.0030668
58	.0000009	.0000035	.0000121	.0000385	.0001124	.0003024	.0007543	.0017506
59	.0000004	.0000015	.0000053	.0000178	.0000545	.0001536	.0004006	.0009710
60	.0000002	.0000008	.0000023	.0000070	.0000257	.0000758	.0002067	.0005233
61	.0000001	.0000002	.0000010	.0000035	.0001118	.0000363	.0001036	.0002740
62		.0000001	.0000004	.0000015	.0000052	.0000169	.0000504	.0001394
63			.0000002	.0000008	.0000023	.0000076	.0000230	.0000609
64			.0000001	.0000005	.0000016	.0000053	.0000169	.0000504
65				.0000001	.0000004	.0000014	.0000049	.0000154
66					.0000002	.0000006	.0000021	.0000070
67					.0000001	.0000003	.0000009	.0000031
68						.0000001	.0000004	.0000013
69							.0000001	.0000005
70							.0000001	.0000003
71								.0000001
x	.33	.34	.35	.36	.37	.38	.39	.40
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
14	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
15	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
16	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
17	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
18	.9999998	.9999998	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
19	.9999998	.9999998	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
20	.9999998	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
21	.9999995	.9999998	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
22	.9999980	.9999998	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000
23	.9999965	.9999998	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000
24	.9999927	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000
25	.9999849	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
26	.9999644	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
27	.9999256	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
28	.9998561	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
29	.9997208	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
30	.9994910	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
31	.9991109	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
32	.9985066	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
33	.9975645	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
34	.9963405	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
35	.9948402	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
36	.9917938	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
37	.9847228	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
38	.9716183	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
39	.9530645	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
40	.9284566	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
41	.8969334	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
42	.8591154	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
43	.8153222	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
44	.7670770	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
45	.7153038	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
46	.6606684	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
47	.6037229	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
48	.5446642	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
49	.4828116	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
50	.4183328	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
51	.3515137	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
52	.2825314	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
53	.2119906	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
54	.1402501	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
55	.0685188	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
56	.0104055	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
57	.0037229	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
58	.0013794	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
59	.0005197	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
60	.0001934	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
61	.0000749	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
62	.0000314	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
63	.0000184	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
64	.0000092	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
65	.0000045	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
66	.0000021	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
67	.0000009	.9999998	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999

$$F(x, y, z) = \sum_{n=0}^{\infty} \frac{(-1)^n}{n!} F^{(n)}(x, y, z) x^n y^n z^n$$

n = 150

	.33	.34	.35	.36	.37	.38	.39	.40
60	.00000044	.00000115	.00000391	.0001057	.0002673	.0006153	.0014817	.0030015
69	.00000019	.00000061	.00000185	.0000520	.0001343	.0003387	.0008066	.0017318
70	.00000008	.00000027	.00000085	.0000248	.0000681	.0001755	.0004352	.0009708
71	.00000003	.00000011	.00000038	.0000115	.0000339	.0000883	.0002237	.0005599
72	.00000001	.00000005	.00000016	.0000052	.0000154	.0000432	.0001133	.0002798
73		.00000002	.00000007	.0000023	.0000070	.0000205	.0000559	.0001438
74		.00000001	.00000003	.0000010	.0000031	.0000094	.0000266	.0000718
75			.00000001	.0000004	.0000013	.0000048	.0000125	.0000348
76				.0000008	.0000026	.0000081	.0000205	.0000516
77				.0000001	.0000002	.0000008	.0000028	.0000074
78					.0000001	.0000003	.0000010	.0000033
79						.0000001	.0000004	.0000014
80							.0000001	.0000006
81							.0000001	.0000003
82								.0000001
83								
84								
85								
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$$P(n, n, 1) = \sum_{j=0}^n \binom{n}{j} p^j (1-p)^{n-j}$$

n. 136

[illegible]

1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	1.00000000	1.00000000
19	1.00000000	1.00000000
20	1.00000000	1.00000000
21	1.00000000	1.00000000
22	1.00000000	1.00000000
23	1.00000000	1.00000000
24	1.00000000	1.00000000
25	1.00000000	1.00000000
26	1.00000000	1.00000000
27	1.00000000	1.00000000
28	1.00000000	1.00000000
29	1.00000000	1.00000000
30	1.00000000	1.00000000
31	1.00000000	1.00000000
32	1.00000000	1.00000000
33	1.00000000	1.00000000
34	1.00000000	1.00000000
35	1.00000000	1.00000000
36	1.00000000	1.00000000
37	1.00000000	1.00000000
38	1.00000000	1.00000000
39	1.00000000	1.00000000
40	1.00000000	1.00000000
41	1.00000000	1.00000000
42	1.00000000	1.00000000
43	1.00000000	1.00000000
44	1.00000000	1.00000000
45	1.00000000	1.00000000
46	1.00000000	1.00000000
47	1.00000000	1.00000000
48	1.00000000	1.00000000
49	1.00000000	1.00000000
50	1.00000000	1.00000000
51	1.00000000	1.00000000
52	1.00000000	1.00000000
53	1.00000000	1.00000000
54	1.00000000	1.00000000
55	1.00000000	1.00000000
56	1.00000000	1.00000000
57	1.00000000	1.00000000
58	1.00000000	1.00000000
59	1.00000000	1.00000000
60	1.00000000	1.00000000
61	1.00000000	1.00000000
62	1.00000000	1.00000000
63	1.00000000	1.00000000
64	1.00000000	1.00000000
65	1.00000000	1.00000000
66	1.00000000	1.00000000
67	1.00000000	1.00000000
68	1.00000000	1.00000000
69	1.00000000	1.00000000
70	1.00000000	1.00000000
71	1.00000000	1.00000000
72	1.00000000	1.00000000
73	1.00000000	1.00000000
74	1.00000000	1.00000000
75	1.00000000	1.00000000
76	1.00000000	1.00000000
77	1.00000000	1.00000000
78	1.00000000	1.00000000
79	1.00000000	1.00000000
80	1.00000000	1.00000000

$$P(r, n, p) = \sum_{i=0}^n \binom{n}{i} p^i (1-p)^{n-i}$$

n = 130

	.49	.50
79	.0042219	.0047708
80	.0087186	.0083470
81	.0154955	.0131643
82	.027374	.0218170
83	.04600	.0410112
84	.07392	.068463
85	.1205	.108339
86	.0000588	.0001448
87	.0000278	.0000710
88	.0000187	.0000337
89	.0000036	.0000155
90	.0000024	.0000069
91	.0000010	.0000029
92	.0000004	.0000012
93	.0000002	.0000006
94	.0000001	.0000002
95		.0000001

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 131

	.17	.18	.19	.20	.21	.22	.23	.24
14	.9839101	.9923558	.9965458	.9985121	.9993878	.9997590	.9999091	.9999671
15	.9868757	.9947908	.9972082	.9986725	.9993518	.9997978	.9999404	.9999886
16	.9874545	.9918380	.9956666	.9973053	.9986184	.9996731	.9999439	.9999764
17	.9141603	.9512242	.9737456	.9865835	.9934778	.9969782	.9986335	.9994349
18	.8680298	.9206140	.9547979	.9758779	.9874706	.9938777	.9971472	.9987305
19	.8081898	.8780584	.9266492	.9581780	.9773573	.9883373	.9942780	.9973218
20	.7352966	.8225013	.8873800	.9322923	.9613606	.9790488	.9891832	.9946761
21	.6516890	.7542066	.8357968	.8960524	.9375678	.9643747	.9806595	.9899973
22	.5611743	.6747657	.7718409	.8481639	.9041261	.9424978	.9672019	.9821876
23	.4684780	.5879940	.6968309	.7883032	.8596781	.9116458	.9471029	.9698565
24	.3785011	.4975176	.6044622	.7117814	.8036843	.8704066	.9185511	.9514022
25	.2955707	.4081446	.5254290	.6375943	.7367042	.8180645	.8804074	.9251776
26	.2228716	.3241776	.4370641	.5522221	.6604995	.7546782	.8315151	.8897330
27	.1621656	.2490326	.3525594	.4652082	.5779134	.6822202	.7719749	.8441000
28	.1138120	.1848844	.2754735	.3806113	.4925397	.6025242	.7028121	.7880593
29	.0770267	.1325824	.2083122	.3020570	.4082466	.5190330	.6260785	.7223275
30	.0502668	.0918054	.1523587	.2323062	.3266631	.4353942	.5446715	.6486028
31	.0316316	.0613718	.1077341	.1733018	.2567357	.3551868	.4619950	.5694458
32	.0191960	.0359606	.0736304	.1244269	.1944417	.2814809	.3815369	.4880041
33	.0112165	.0246714	.0486314	.0869995	.1425943	.2165187	.3064331	.4076340
34	.0063458	.0148435	.0310396	.0587039	.1014273	.1615452	.2391324	.3314939
35	.0034584	.0086219	.0191456	.0363144	.0698088	.1168558	.1811870	.2621900
36	.0018195	.0048372	.0114135	.0241874	.0465152	.0819227	.1332217	.2015352
37	.0009243	.0023770	.0055770	.0114769	.0230033	.0456482	.0850140	.1304889
38	.0004535	.0011731	.0028641	.0067241	.0137336	.0266206	.0571111	.1090451
39	.0002150	.0005651	.0013738	.0034855	.0073230	.0133450	.0240595	.0466941
40	.0001098	.0003402	.0008264	.0020264	.0045567	.0096256	.0184160	.0353326
41	.0000436	.0001162	.0002584	.0006452	.0014751	.0032236	.0060420	.0114638
42	.0000187	.0000473	.0001028	.0002528	.0005461	.0011975	.0022367	.0042367
43	.0000077	.0000197	.0000433	.0001033	.0002340	.0005058	.0009215	.0017446
44	.0000031	.0000080	.0000180	.0000425	.0000960	.0002126	.0004119	.0007593
45	.0000012	.0000030	.0000068	.0000157	.0000356	.0000780	.0001462	.0002850
46	.0000005	.0000012	.0000027	.0000062	.0000135	.0000293	.0000541	.0001039
47	.0000002	.0000005	.0000011	.0000025	.0000053	.0000112	.0000215	.0000412
48	.0000001	.0000003	.0000007	.0000015	.0000033	.0000069	.0000127	.0000243
49		.0000001	.0000003	.0000007	.0000015	.0000033	.0000069	.0000127
50			.0000001	.0000003	.0000007	.0000015	.0000033	.0000069
51				.0000001	.0000003	.0000007	.0000015	.0000033
52					.0000001	.0000003	.0000007	.0000015
53						.0000001	.0000003	.0000007
54							.0000001	.0000003
55								.0000001
56								
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	.25	.26	.27	.28	.29	.30	.31	.32
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	.9999994	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13	.9999991	.9999994	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
14	.9999988	.9999991	.9999994	.9999997	.9999999	1.0000000	1.0000000	1.0000000
15	.9999984	.9999988	.9999991	.9999994	.9999997	.9999999	1.0000000	1.0000000
16	.9999979	.9999984	.9999988	.9999991	.9999994	.9999997	.9999999	1.0000000
17	.9999974	.9999979	.9999984	.9999988	.9999991	.9999994	.9999997	.9999999
18	.9999969	.9999974	.9999979	.9999984	.9999988	.9999991	.9999994	.9999997
19	.9999964	.9999969	.9999974	.9999979	.9999984	.9999988	.9999991	.9999994
20	.9999959	.9999964	.9999969	.9999974	.9999979	.9999984	.9999988	.9999991
21	.9999954	.9999959	.9999964	.9999969	.9999974	.9999979	.9999984	.9999988
22	.9999949	.9999954	.9999959	.9999964	.9999969	.9999974	.9999979	.9999984
23	.9999944	.9999949	.9999954	.9999959	.9999964	.9999969	.9999974	.9999979
24	.9999939	.9999944	.9999949	.9999954	.9999959	.9999964	.9999969	.9999974
25	.9999934	.9999939	.9999944	.9999949	.9999954	.9999959	.9999964	.9999969
26	.9999929	.9999934	.9999939	.9999944	.9999949	.9999954	.9999959	.9999964
27	.9999924	.9999929	.9999934	.9999939	.9999944	.9999949	.9999954	.9999959
28	.9999919	.9999924	.9999929	.9999934	.9999939	.9999944	.9999949	.9999954
29	.9999914	.9999919	.9999924	.9999929	.9999934	.9999939	.9999944	.9999949
30	.9999909	.9999914	.9999919	.9999924	.9999929	.9999934	.9999939	.9999944
31	.9999904	.9999909	.9999914	.9999919	.9999924	.9999929	.9999934	.9999939
32	.9999899	.9999904	.9999909	.9999914	.9999919	.9999924	.9999929	.9999934
33	.9999894	.9999899	.9999904	.9999909	.9999914	.9999919	.9999924	.9999929
34	.9999889	.9999894	.9999899	.9999904	.9999909	.9999914	.9999919	.9999924
35	.9999884	.9999889	.9999894	.9999899	.9999904	.9999909	.9999914	.9999919
36	.9999879	.9999884	.9999889	.9999894	.9999899	.9999904	.9999909	.9999914
37	.9999874	.9999879	.9999884	.9999889	.9999894	.9999899	.9999904	.9999909
38	.9999869	.9999874	.9999879	.9999884	.9999889	.9999894	.9999899	.9999904
39	.9999864	.9999869	.9999874	.9999879	.9999884	.9999889	.9999894	.9999899
40	.9999859	.9999864	.9999869	.9999874	.9999879	.9999884	.9999889	.9999894
41	.9999854	.9999859	.9999864	.9999869	.9999874	.9999879	.9999884	.9999889
42	.9999849	.9999854	.9999859	.9999864	.9999869	.9999874	.9999879	.9999884
43	.9999844	.9999849	.9999854	.9999859	.9999864	.9999869	.9999874	.9999879
44	.9999839	.9999844	.9999849	.9999854	.9999859	.9999864	.9999869	.9999874
45	.9999834	.9999839	.9999844	.9999849	.9999854	.9999859	.9999864	.9999869
46	.9999829	.9999834	.9999839	.9999844	.9999849	.9999854	.9999859	.9999864
47	.9999824	.9999829	.9999834	.9999839	.9999844	.9999849	.9999854	.9999859
48	.9999819	.9999824	.9999829	.9999834	.9999839	.9999844	.9999849	.9999854
49	.9999814	.9999819	.9999824	.9999829	.9999834	.9999839	.9999844	.9999849
50	.9999809	.9999814	.9999819	.9999824	.9999829	.9999834	.9999839	.9999844
51	.9999804	.9999809	.9999814	.9999819	.9999824	.9999829	.9999834	.9999839
52	.9999799	.9999804	.9999809	.9999814	.9999819	.9999824	.9999829	.9999834
53	.9999794	.9999799	.9999804	.9999809	.9999814	.9999819	.9999824	.9999829
54	.9999789	.9999794	.9999799	.9999804	.9999809	.9999814	.9999819	.9999824
55	.9999784	.9999789	.9999794	.9999799	.9999804	.9999809	.9999814	.9999819
56	.9999779	.9999784	.9999789	.9999794	.9999799	.9999804	.9999809	.9999814
57	.9999774	.9999779	.9999784	.9999789	.9999794	.9999799	.9999804	.9999809
58	.9999769	.9999774	.9999779	.9999784	.9999789	.9999794	.9999799	.9999804
59	.9999764	.9999769	.9999774	.9999779	.9999784	.9999789	.9999794	.9999799

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$$P(n, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 131

x	.25	.26	.27	.28	.29	.30	.31	.32
47	.0036450	.0079667	.0160824	.0301455	.0527263	.0864464	.1334292	.1946828
48	.0020482	.0046999	.0099429	.0194974	.0356135	.0608695	.0977647	.1481552
49	.0011168	.0026913	.0055691	.0112258	.0213815	.0416869	.0697241	.1081383
50	.0005908	.0014958	.0034795	.0074773	.0149186	.0279613	.0463647	.0792953
51	.0003033	.0008070	.0019693	.0044328	.0098496	.0179736	.0326616	.0557232
52	.0001511	.0004226	.0010822	.0025524	.0055721	.0113114	.0214423	.0381053
53	.0000731	.0002148	.0005774	.0014274	.0032612	.0069187	.0136877	.0255503
54	.0000343	.0001060	.0002892	.0007752	.0018542	.0041126	.0084945	.0164034
55	.0000156	.0000508	.0001505	.0004089	.0010242	.0023755	.0051244	.0103818
56	.0000069	.0000236	.0000735	.0002095	.0005495	.0013332	.0030047	.0063151
57	.0000030	.0000107	.0000349	.0001042	.0002864	.0007270	.0017122	.0037562
58	.0000012	.0000047	.0000161	.0000503	.0001450	.0003852	.0009482	.0021718
59	.0000005	.0000020	.0000072	.0000236	.0000713	.0001922	.0005102	.0012805
60	.0000002	.0000008	.0000031	.0000108	.0000340	.0000991	.0002668	.0006666
61	.0000001	.0000003	.0000013	.0000048	.0000158	.0000481	.0001355	.0003538
62		.0000001	.0000005	.0000020	.0000071	.0000227	.0000669	.0001825
63			.0000002	.0000009	.0000031	.0000104	.0000321	.0000914
64			.0000001	.0000001	.0000003	.0000013	.0000046	.0000149
65				.0000001	.0000005	.0000020	.0000068	.0000210
66				.0000001	.0000002	.0000008	.0000030	.0000097
67					.0000001	.0000001	.0000003	.0000013
68						.0000001	.0000002	.0000008
69							.0000001	.0000005
70								.0000001
71								.0000001

x	.33	.34	.35	.36	.37	.38	.39	.40
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
14	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
15	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
16	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
17	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
18	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
19	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
20	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
21	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
22	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
23	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
24	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
25	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
26	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
27	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
28	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
29	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
30	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
31	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
32	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
33	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
34	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
35	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
36	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
37	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
38	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
39	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
40	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
41	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
42	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
43	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
44	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
45	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
46	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
47	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
48	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
49	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
50	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
51	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
52	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
53	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
54	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
55	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
56	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
57	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
58	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
59	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
60	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
61	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
62	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
63	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
64	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
65	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
66	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
67	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
68	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
69	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
70	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
71	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 131

x	.33	.34	.35	.36	.37	.38	.39	.40
68	.0000062	.0000188	.0000537	.0001428	.0003559	.0008335	.0018379	.0038240
69	.0000027	.0000086	.0000257	.0000713	.0001852	.0004514	.0010354	.0022395
70	.0000012	.0000039	.0000120	.0000346	.0000936	.0002375	.0005669	.0012751
71	.0000005	.0000017	.0000054	.0000163	.0000459	.0001214	.0003016	.0007054
72	.0000002	.0000007	.0000024	.0000075	.0000219	.0000603	.0001559	.0003794
73	.0000001	.0000003	.0000010	.0000033	.0000101	.0000291	.0000783	.0001982
74		.0000001	.0000004	.0000014	.0000046	.0000136	.0000382	.0001006
75			.0000002	.0000006	.0000020	.0000062	.0000181	.0000494
76			.0000001	.0000002	.0000008	.0000027	.0000083	.0000237
77				.0000001	.0000003	.0000012	.0000037	.0000110
78					.0000001	.0000005	.0000016	.0000050
79					.0000001	.0000002	.0000007	.0000022
80						.0000001	.0000003	.0000009
81							.0000001	.0000004
82								.0000002
83								.0000001

x	.41	.42	.43	.44	.45	.46	.47	.48
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
14	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
15	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
16	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
17	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
18	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
19	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
20	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
21	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
22	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
23	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
24	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
25	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
26	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
27	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
28	.9999994	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
29	.9999984	.9999995	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
30	.9999959	.9999984	.9999995	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
31	.9999900	.9999954	.9999988	.9999996	.9999999	1.0000000	1.0000000	1.0000000
32	.9999760	.9999813	.9999929	.9999990	.9999997	.9999999	1.0000000	1.0000000
33	.9999478	.9999798	.9999926	.9999974	.9999991	.9999997	.9999999	1.0000000
34	.9998875	.9999548	.9999827	.9999937	.9999978	.9999993	.9999998	.9999999
35	.9997667	.9999028	.9999612	.9999852	.9999946	.9999981	.9999994	.9999998
36	.9995341	.9997977	.9999162	.9999668	.9999875	.9999953	.9999984	.9999995
37	.9991911	.9995195	.9998251	.9999283	.9999719	.9999935	.9999983	.9999993
38	.9983341	.9992195	.9996506	.9998507	.9999391	.9999763	.9999912	.9999989
39	.9970111	.9984458	.9993238	.9996997	.9998727	.9999485	.9999801	.9999927
40	.9948215	.9973824	.9987358	.9994169	.9997432	.9998921	.9999566	.9999835
41	.9913205	.9954440	.9977156	.9989057	.9994995	.9997816	.9999091	.9999639
42	.9869199	.9933307	.9960074	.9980143	.9992570	.9997216	.9998842	.9999283
43	.9809478	.9894984	.9932453	.9965134	.9985111	.9991911	.9997369	.9998446
44	.9663117	.9802557	.9889143	.9940726	.9969671	.9985185	.9993095	.9996932
45	.9500366	.9697664	.9824290	.9917071	.9948171	.9973726	.9987290	.9994114
46	.9286393	.9550813	.9729411	.9860909	.9914161	.9954854	.9977336	.9989148
47	.9050005	.9320003	.9595596	.9815224	.9862138	.9924799	.9960834	.9980538
48	.8653171	.9091639	.9413031	.9785160	.9878496	.9940496	.9974368	.9986166
49	.8234334	.8761694	.9172013	.9691	.9674941	.9809471	.9897106	.9942949
50	.7719548	.8356985	.8864030	.95138	.9522189	.9709872	.9811	.9906647
51	.7144264	.7876357	.848299	.903064	.9317224	.9570728	.974176	.9851692
52	.6509389	.7223586	.802646	.82498	.9050879	.9382475	.9615504	.9771124
53	.5850319	.6607767	.7496672	.81913	.8715619	.9135762	.9443094	.9656708
54	.5197339	.6043069	.702202	.773286	.8306751	.8822500	.9215200	.9499283
55	.4482162	.5347807	.6372004	.727306	.7823544	.8437045	.8983285	.9489301
56	.3734995	.4642957	.569238	.671208	.7870053	.7977356	.8560859	.9018124
57	.3087434	.3950239	.486747	.584399	.6655461	.7445915	.8124701	.8678308
58	.2495329	.3290248	.416741	.504152	.5935220	.6850246	.7615765	.8254951
59	.1970739	.2680463	.349722	.43187	.5303741	.6202046	.7039943	.7779293
60	.1518984	.2134116	.287	.3705685	.4603948	.5580493	.6408141	.7224338
61	.1142583	.161778	.223	.3065011	.3917468	.4822981	.5735608	.6607385
62	.0838136	.123	.180	.2479103	.3263726	.4131396	.5041847	.5948685
63	.0599873	.0932	.130	.185452	.2459833	.3162851	.3947048	.4850115
64	.0437475	.0673955	.1017416	.138074	.1812771	.2345684	.2972218	.3679776
65	.0283245	.0422964	.071546	.1138676	.1648241	.22881014	.3037777	.3861227
66	.0187096	.0323953	.0533299	.0832688	.1251796	.1790832	.2455174	.3231605
67	.0120881	.0216052	.0368655	.0598667	.0928887	.1370714	.1939761	.2631953
68	.0075236	.0140248	.0248159	.0417543	.0669286	.1023518	.1496351	.2094951
69	.0045775	.0088884	.0167594	.0289717	.0470913	.0745187	.1138441	.1680415
70	.0027093	.0054436	.0103676	.0187553	.0322591	.0530653	.0826613	.1235216
71	.0015377	.0032317	.0064302	.0120656	.0215179	.0365302	.0591258	.0913748
72	.0008708	.0018887	.0038782	.0073517	.0133674	.0245730	.0411933	.0658793
73	.0004730	.0010268	.0020739	.0041592	.0080193	.0160883	.0279418	.0462677
74	.0002496	.0005848	.0011957	.0023714	.0047013	.0094180	.0184441	.0316366
75	.0001279	.0003118	.0007173	.0014636	.0029319	.0063441	.0128427	.0230611
76	.0000637	.0001612	.0003657	.0007734	.0016745	.0035185	.0073936	.0136949

$$F(c, n, r) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 131

	.41	.42	.43	.44	.45	.46	.47	.48
77	.0000367	.0000810	.0002014	.0004738	.0010551	.0023332	.0044864	.0083739
78	.0000144	.0000395	.0001021	.0002496	.0005778	.0012686	.0024450	.0045436
79	.0000064	.0000187	.0000502	.0001276	.0003069	.0006997	.0015144	.0031155
80	.0000029	.0000086	.0000240	.0000633	.0001582	.0003746	.0008418	.0017974
81	.0000012	.0000038	.0000111	.0000305	.0000791	.0001946	.0004541	.0010066
82	.0000005	.0000016	.0000050	.0000142	.0000384	.0000981	.0002377	.0005470
83	.0000002	.0000007	.0000022	.0000064	.0000180	.0000479	.0001206	.0002883
84	.0000001	.0000003	.0000009	.0000028	.0000082	.0000227	.0000593	.0001473
85		.0000001	.0000004	.0000012	.0000036	.0000104	.0000283	.0000729
86			.0000001	.0000005	.0000016	.0000046	.0000131	.0000350
87			.0000001	.0000002	.0000006	.0000020	.0000058	.0000163
88				.0000001	.0000003	.0000010	.0000025	.0000073
89					.0000001	.0000003	.0000011	.0000032
90						.0000001	.0000004	.0000013
91							.0000002	.0000005
92							.0000001	.0000002
93								.0000001

	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	1.00000000	1.00000000
19	1.00000000	1.00000000
20	1.00000000	1.00000000
21	1.00000000	1.00000000
22	1.00000000	1.00000000
23	1.00000000	1.00000000
24	1.00000000	1.00000000
25	1.00000000	1.00000000
26	1.00000000	1.00000000
27	1.00000000	1.00000000
28	1.00000000	1.00000000
29	1.00000000	1.00000000
30	1.00000000	1.00000000
31	1.00000000	1.00000000
32	1.00000000	1.00000000
33	1.00000000	1.00000000
34	1.00000000	1.00000000
35	.99999999	1.00000000
36	.99999998	1.00000000
37	.99999996	.99999997
38	.99999993	.99999997
39	.99999974	.99999991
40	.99999940	.99999979
41	.99999864	.99999951
42	.99999701	.99999888
43	.99999537	.99999854
44	.999993701	.99999777
45	.99999222	.999996921
46	.99999047	.99999647
47	.99998881	.999995840
48	.999987267	.999995209
49	.999985902	.999994586
50	.999984616	.999993971
51	.999983452	.999993443
52	.999982386	.999992911
53	.999981479	.999992384
54	.999980628	.999991860
55	.999979835	.999991346
56	.999979093	.999990835
57	.999978413	.999990328
58	.999977745	.999989825
59	.999977090	.999989326
60	.999976446	.999988831
61	.999975812	.999988340
62	.999975186	.999987852
63	.999974567	.999987367
64	.999973955	.999986886
65	.999973349	.999986409
66	.999972748	.999985936
67	.999972152	.999985467
68	.999971561	.999984999
69	.999970975	.999984534
70	.999970394	.999984072
71	.999969818	.999983613
72	.999969246	.999983158
73	.999968678	.999982707
74	.999968114	.999982259
75	.999967554	.999981814
76	.999966998	.999981372
77	.999966446	.999980932

AMCP 706-109

n = 121

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

	.49	.50
78	.0098961	.0178000
79	.0060982	.0113716
80	.0036502	.0070589
81	.0021214	.0042557
82	.0011965	.0024907
83	.0006547	.0014144
84	.0003474	.0007791
85	.0001787	.0004160
86	.0000890	.0002153
87	.0000430	.0001079
88	.0000201	.0000523
89	.0000091	.0000246
90	.0000040	.0000112
91	.0000017	.0000049
92	.0000007	.0000021
93	.0000003	.0000009
94	.0000001	.0000003
95		.0000001

AMCP 706-109

$$P(a, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 132

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.7346338	.9305229	.9820501	.9954312	.9988531	.9997163	.9999309	.9999834
2	.3808121	.7433599	.9088107	.9703028	.9908854	.9973259	.9992439	.9997929
3	.1467180	.4931727	.7604280	.9017231	.9634174	.9873319	.9958570	.9987080
4	.0442525	.3719188	.6615646	.7778906	.9007717	.9598889	.9848104	.9946197
5	.0108736	.1262975	.3632138	.6115095	.7944386	.9027857	.9574954	.9835547
6	.0022423	.0502179	.2061690	.4340270	.6511687	.8098033	.9063268	.9576331
7	.0003969	.0171535	.1033613	.3774989	.4915610	.641781	.8240074	.9106588
8	.0000614	.0052809	.0461203	.1601021	.3403537	.5398429	.7184787	.8371323
9	.0000084	.0014312	.0184704	.0836719	.2160057	.3950915	.5813124	.7373310
10	.0000010	.0003488	.0066849	.0397954	.1289351	.2692959	.4452888	.6175468
11	.0000001	.0000770	.0023016	.0173086	.0674616	.1699050	.3193161	.4693547
12		.0000155	.0006638	.0069170	.0333870	.0995431	.2142881	.3660764
13		.0000029	.0001842	.0025511	.0153036	.0542570	.1344400	.2578267
14		.0000005	.0000473	.0008719	.0065182	.0275745	.0790042	.1709373
15		.0000001	.0000113	.0002772	.0025878	.0130978	.0435371	.1067147
16			.0000025	.0000828	.0009605	.0058287	.0285366	.0687827
17			.0000005	.0000228	.0003342	.0024358	.0109778	.0348477
18			.0000001	.0000060	.0001093	.0009580	.0050412	.0182725
19				.0000015	.0000337	.0003554	.0021864	.0090640
20				.0000003	.0000098	.0001246	.0008978	.0042596
21				.0000001	.0000027	.0000414	.0003489	.0018998
22					.0000007	.0000130	.0001888	.0008045
23					.0000002	.0000039	.0000458	.0003242
24						.0000011	.0000151	.0001244
25						.0000003	.0000048	.0000456
26						.0000001	.0000015	.0000159
27							.0000004	.0000053
28							.0000001	.0000017
29								.0000005
30								.0000002

x	.09	.10	.11	.12	.13	.14	.15	.16
1	.9999961	.9999991	.9999998	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	.9999949	.9999985	.9999995	.9999999	.9999999	.9999999	1.0000000	1.0000000
3	.9999932	.9999984	.9999998	.9999999	.9999999	.9999999	.9999999	1.0000000
4	.9999919	.9999996	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
5	.9999984	.9999997	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
6	.9821801	.9929625	.9973712	.9990659	.9996828	.9998968	.9999677	.9999903
7	.9581514	.9817264	.9925009	.9970891	.9989258	.9996216	.9998723	.9999586
8	.9153751	.9592542	.9816658	.9922369	.9968895	.9988152	.9995694	.9998502
9	.8492715	.9202399	.9407413	.9818985	.9921352	.9967641	.9987341	.9995276
10	.7591964	.8605144	.9251097	.9624749	.9823473	.9921637	.9967033	.9986008
11	.6496214	.7788895	.8709415	.9289861	.9643578	.9829523	.9922951	.9966969
12	.5294283	.6783013	.7964886	.8862421	.9345445	.9683211	.9866673	.9925060
13	.4095654	.5656053	.7041504	.8128750	.8962247	.9390213	.9683150	.9844566
14	.3001386	.4500196	.5905754	.7275965	.8376663	.8979955	.9433067	.9727435
15	.2081479	.3408553	.4870623	.6287509	.7489720	.8412344	.9057943	.9473899
16	.1365772	.2454377	.3798233	.5237166	.6564685	.7685410	.8537182	.9130554
17	.0848162	.1679108	.2823591	.4169835	.5553926	.6820064	.7865171	.8658322
18	.0498850	.1091323	.2001620	.3186009	.4523347	.5858831	.7055967	.8030756
19	.0278131	.0674068	.1352561	.2328877	.3539493	.4859100	.6177625	.7274352
20	.0147155	.0395898	.0871236	.1627606	.2657417	.3982617	.5177625	.6409880
21	.0073967	.0221269	.05335120	.1087300	.1912722	.2984481	.4214461	.5479535
22	.0035362	.0117785	.03115560	.0694351	.1319249	.2204703	.3307955	.4534473
23	.0016098	.0059772	.0175396	.0423995	.0871818	.1564231	.2500824	.3628802
24	.0006987	.0028943	.0093726	.0247676	.0552065	.1065502	.1819615	.2798792
25	.0002894	.0013306	.0047883	.0138479	.0335060	.0696910	.1273645	.2083017
26	.0001145	.0005919	.0023405	.0074151	.0194993	.0437639	.0857423	.1494036
27	.0000433	.0002504	.0010955	.0038052	.0108855	.0263942	.0555145	.1032344
28	.0000157	.0000815	.0004914	.0018725	.0058323	.0152931	.0345723	.0688709
29	.0000054	.0000394	.0002114	.0008843	.0030008	.0085161	.0207135	.0440485
30	.0000018	.0000147	.0000673	.0004010	.0014835	.0045600	.0119429	.0278030
31	.0000006	.0000053	.0000346	.0001747	.0007050	.0023488	.0066289	.0161866
32	.0000002	.0000010	.0000132	.0000732	.0003223	.0011643	.0035433	.0092823
33	.0000001	.0000006	.0000048	.0000295	.0001418	.0005558	.0018247	.0051316
34		.0000002	.0000014	.0000114	.0000601	.0002556	.0009057	.0027357
35		.0000001	.0000006	.0000043	.0000245	.0001133	.0004334	.0014069
36			.0000002	.0000013	.0000097	.0000484	.0002001	.0006982
37			.0000001	.0000005	.0000037	.0000200	.0000891	.0003345
38				.0000002	.0000013	.0000079	.0000383	.0001548
39				.0000001	.0000005	.0000031	.0000159	.0000658
40					.0000002	.0000011	.0000064	.0000299
41					.0000001	.0000004	.0000025	.0000125
42						.0000001	.0000009	.0000050
43							.0000003	.0000020
44							.0000001	.0000007
45								.0000003
46								.0000001

x	.17	.18	.19	.20	.21	.22	.23	.24
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	.9999995	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	.9999972	.9999992	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
7	.9999971	.9999961	.9999989	.9999997	.9999999	1.0000000	1.0000000	1.0000000
8	.9999950	.9999840	.9999950	.9999985	.9999996	.9999999	1.0000000	1.0000000
9	.9999913	.9999423	.9999810	.9999940	.9999982	.9999995	.9999998	1.0000000
10	.9999464	.9998161	.9999356	.9999784	.9999930	.9999978	.9999993	.9999998
11	.9986525	.9994755	.9993047	.9999303	.9999761	.9999921	.9999975	.9999998
12	.9967357	.9986463	.9994642	.9997972	.9999264	.9999744	.9999914	.9999978
13	.9927769	.9968108	.9990587	.9994615	.9997932	.9999839	.9999731	.9999909

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 132

%	.17	.18	.19	.20	.21	.22	.23	.24
14	.9852922	.9930917	.9959147	.9986867	.9994662	.9997924	.9999227	.9999724
15	.9722616	.9861525	.9934373	.9970405	.9987274	.9994773	.9997946	.9999227
16	.9512661	.9741695	.9870807	.9938020	.9971824	.9987760	.9994934	.9997992
17	.9198203	.9549347	.9760144	.9878839	.9941793	.9973357	.9988361	.9995140
18	.8750720	.9261239	.9583980	.9777070	.9887321	.9945558	.9974960	.9988994
19	.8183626	.8857185	.9319974	.9616600	.9794811	.9895578	.9949386	.9976399
20	.7476085	.8325016	.9048412	.9577795	.9847262	.9810928	.9903552	.9953111
21	.6559023	.7664996	.8455976	.9033004	.9425659	.9676030	.9826199	.9911202
22	.5765616	.6892291	.7839925	.8577116	.9111488	.9473107	.9702972	.9840619
23	.4842363	.6036499	.7110828	.8002753	.8690123	.9184332	.9517857	.9728160
24	.3937972	.5138034	.6222893	.7156557	.7854430	.8794792	.9251950	.9558312
25	.3096689	.4242317	.5421523	.6535517	.7507760	.8295797	.8892035	.9314715
26	.2352305	.3392916	.4538534	.5692775	.6765025	.7687792	.8427603	.8982397
27	.1724856	.2625587	.3686153	.4807799	.5992565	.6982050	.7856691	.8550619
28	.1230321	.1964311	.2901198	.3939954	.5104662	.6200573	.7187195	.8015091
29	.0813802	.1419968	.2210728	.317778	.4259462	.5374011	.6437272	.7380136
30	.0548160	.0991458	.1629899	.2462564	.3453756	.4577948	.5633951	.6622967
31	.0347996	.0668498	.1162120	.1848757	.2718404	.3728324	.4810113	.5884435
32	.0213101	.0435239	.0801101	.1343852	.2075234	.2976962	.4000425	.5075501
33	.0125097	.0273629	.0533813	.0945450	.1535612	.2308061	.3237070	.4269228
34	.0071772	.0166128	.0343821	.0643630	.1100934	.1736367	.2546116	.3497675
35	.0039493	.0097417	.0214055	.0423923	.0764467	.1266874	.1945159	.2788229
36	.0020981	.0055184	.0128826	.0270128	.0514069	.0896080	.1442542	.2160729
37	.0010765	.0030208	.0074529	.0165530	.0334700	.0614286	.1038039	.1627144
38	.0005336	.0015779	.0042175	.0099331	.0211002	.0408067	.0724508	.1189844
39	.0002556	.0008172	.0022950	.0057332	.0128793	.0262656	.0490394	.0844583
40	.0001183	.0004041	.0012084	.0032025	.0076121	.0163004	.0321844	.0581794
41	.0000530	.0001933	.0006153	.0017315	.0043568	.0098897	.0204789	.0388851
42	.0000236	.0000844	.0002954	.0008263	.0021776	.0057952	.0126312	.0252132
43	.0000106	.0000404	.0001447	.0004264	.0012967	.0038800	.0097555	.0215887
44	.0000039	.0000174	.0000660	.0002255	.0007455	.0022579	.0063812	.0167658
45	.0000015	.0000073	.0000299	.0001072	.0003309	.0009635	.0026632	.0072264
46	.0000006	.0000030	.0000110	.0000494	.0001640	.0004977	.0013429	.0038275
47	.0000002	.0000012	.0000054	.0000220	.0000776	.0002452	.0007092	.0021332
48	.0000001	.0000004	.0000022	.0000095	.0000361	.0001210	.0003640	.0010992
49	.0000000	.0000002	.0000009	.0000040	.0000160	.0000570	.0001810	.0005405
50	.0000000	.0000001	.0000003	.0000016	.0000069	.0000260	.0000873	.0002777
51	.0000000	.0000001	.0000001	.0000006	.0000029	.0000115	.0000409	.0001102
52	.0000000	.0000000	.0000000	.0000002	.0000012	.0000050	.0000186	.0000623
53	.0000000	.0000000	.0000000	.0000001	.0000005	.0000021	.0000082	.0000280
54	.0000000	.0000000	.0000000	.0000000	.0000002	.0000008	.0000035	.0000131
55	.0000000	.0000000	.0000000	.0000000	.0000001	.0000004	.0000015	.0000057
56	.0000000	.0000000	.0000000	.0000000	.0000000	.0000001	.0000006	.0000024
57	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000002	.0000010
58	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000001	.0000004
59	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000002
60	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000001

%	.25	.26	.27	.28	.29	.30	.31	.32
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	.99999997	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	.99999996	.99999999	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
14	.99999995	.99999999	.99999996	.99999997	.99999999	1.00000000	1.00000000	1.00000000
15	.99999994	.99999999	.99999996	.99999999	.99999997	.99999999	1.00000000	1.00000000
16	.99999993	.99999992	.99999993	.99999996	.99999999	.99999997	.99999999	1.00000000
17	.99999992	.99999992	.99999992	.99999994	.99999998	.99999998	.99999999	.99999999
18	.99999991	.99999991	.99999991	.99999994	.99999996	.99999998	.99999999	.99999999
19	.99999990	.99999991	.99999991	.99999993	.99999997	.99999998	.99999999	.99999999
20	.99999989	.99999990	.99999991	.99999993	.99999995	.99999998	.99999999	.99999999
21	.99999988	.99999989	.99999991	.99999993	.99999995	.99999997	.99999999	.99999999
22	.99999987	.99999988	.99999991	.99999993	.99999995	.99999997	.99999999	.99999999
23	.99999986	.99999987	.99999991	.99999993	.99999995	.99999997	.99999999	.99999999
24	.99999985	.99999986	.99999991	.99999993	.99999995	.99999997	.99999999	.99999999
25	.99999984	.99999985	.99999991	.99999993	.99999995	.99999997	.99999999	.99999999
26	.99999983	.99999984	.99999991	.99999993	.99999995	.99999997	.99999999	.99999999
27	.99999982	.99999983	.99999991	.99999993	.99999995	.99999997	.99999999	.99999999
28	.99999981	.99999982	.99999991	.99999993	.99999995	.99999997	.99999999	.99999999
29	.99999980	.99999981	.99999991	.99999993	.99999995	.99999997	.99999999	.99999999
30	.99999979	.99999980	.99999991	.99999993	.99999995	.99999997	.99999999	.99999999
31	.99999978	.99999979	.99999991	.99999993	.99999995	.99999997	.99999999	.99999999
32	.99999977	.99999978	.99999991	.99999993	.99999995	.99999997	.99999999	.99999999
33	.99999976	.99999977	.99999991	.99999993	.99999995	.99999997	.99999999	.99999999
34	.99999975	.99999976	.99999991	.99999993	.99999995	.99999997	.99999999	.99999999
35	.99999974	.99999975	.99999991	.99999993	.99999995	.99999997	.99999999	.99999999
36	.99999973	.99999974	.99999991	.99999993	.99999995	.99999997	.99999999	.99999999
37	.99999972	.99999973	.99999991	.99999993	.99999995	.99999997	.99999999	.99999999
38	.99999971	.99999972	.99999991	.99999993	.99999995	.99999997	.99999999	.99999999
39	.99999970	.99999971	.99999991	.99999993	.99999995	.99999997	.99999999	.99999999
40	.99999969	.99999970	.99999991	.99999993	.99999995	.99999997	.99999999	.99999999
41	.99999968	.99999969	.99999991	.99999993	.99999995	.99999997	.99999999	.99999999
42	.99999967	.99999968	.99999991	.99999993	.99999995	.99999997	.99999999	.99999999
43	.99999966	.99999967	.99999991	.99999993	.99999995	.99999997	.99999999	.99999999
44	.99999965	.99999966	.99999991	.99999993	.99999995	.99999997	.99999999	.99999999
45	.99999964	.99999965	.99999991	.99999993	.99999995	.99999997	.99999999	.99999999
46	.99999963	.99999964	.99999991	.99999993	.99999995	.99999997	.99999999	.99999999

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 132

	.25	.26	.27	.28	.29	.30	.31	.32
47	.0043071	.0093034	.0185605	.0343846	.0594445	.0963461	.1470362	.2121771
48	.0024474	.0054026	.0116026	.0224789	.0425202	.0685426	.1068207	.1630440
49	.0013466	.0032132	.0070420	.0142792	.0269228	.0474417	.0784167	.1220987
50	.0007223	.0018066	.0041517	.0088159	.0173728	.0319350	.0549990	.0890690
51	.0003752	.0009861	.0023771	.0052853	.0108936	.0207099	.0375358	.0632663
52	.0001892	.0005225	.0013217	.0030769	.0066366	.0133100	.0249203	.0437430
53	.0000926	.0002688	.0007137	.0017424	.0039313	.0082365	.0160916	.0294319
54	.0000440	.0001343	.0003743	.0009578	.0023622	.0049544	.0101044	.0193664
55	.0000203	.0000651	.0001906	.0005115	.0012649	.0028966	.0061652	.0122679
56	.0000091	.0000307	.0000943	.0002653	.0006872	.0016439	.0036618	.0075973
57	.0000039	.0000140	.0000453	.0001337	.0003527	.0009089	.0021129	.0045751
58	.0000017	.0000052	.0000211	.0000654	.0001860	.0004877	.0011950	.0026788
59	.0000007	.0000022	.0000096	.0000311	.0000927	.0002543	.0006460	.0015249
60	.0000003	.0000011	.0000042	.0000144	.0000448	.0001389	.0003422	.0008438
61	.0000001	.0000005	.0000018	.0000064	.0000211	.0000634	.0001762	.0004539
62		.0000002	.0000007	.0000028	.0000096	.0000303	.0000882	.0002373
63		.0000001	.0000003	.0000012	.0000043	.0000141	.0000429	.0001206
64			.0000001	.0000005	.0000018	.0000064	.0000202	.0000595
65				.0000002	.0000008	.0000028	.0000093	.0000286
66					.0000001	.0000003	.0000012	.0000041
67						.0000001	.0000005	.0000010
68							.0000002	.0000008
69							.0000001	.0000003
70							.0000001	.0000005
71								.0000003
72								.0000001

	.33	.34	.35	.36	.37	.38	.39	.40
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
14	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
15	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
16	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
17	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
18	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
19	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
20	.9999990	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
21	.9999972	.9999991	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
22	.9999925	.9999974	.9999991	.9999997	.9999999	1.0000000	1.0000000	1.0000000
23	.9999807	.9999921	.9999976	.9999992	.9999997	.9999999	1.0000000	1.0000000
24	.9999588	.9999823	.9999936	.9999978	.9999993	.9999997	.9999999	1.0000000
25	.9999306	.9999572	.9999840	.9999942	.9999980	.9999991	.9999994	.9999999
26	.9997581	.9999013	.9999614	.9999856	.9999948	.9999982	.9999994	.9999998
27	.9994894	.9997828	.9999113	.9999655	.9999871	.9999954	.9999984	.9999995
28	.9991705	.9995431	.9998060	.9999212	.9999694	.9999886	.9999959	.9999986
29	.9988116	.9990801	.9995930	.9998277	.9999362	.9999710	.9999900	.9999960
30	.9983378	.9982248	.9991815	.9996391	.9998478	.9999386	.9999763	.9999912
31	.9973537	.9967119	.9984209	.9992748	.9996815	.9998662	.9999463	.9999794
32	.9888119	.9941475	.9970734	.9993603	.9997203	.9998831	.9999533	.9999853
33	.9815261	.9859781	.9947832	.9974019	.9987640	.9994381	.9997554	.9998984
34	.9708261	.9834582	.9910462	.9956386	.9970050	.9989139	.9995087	.9997875
35	.9553803	.9737060	.9831872	.9920224	.9958927	.9979784	.9990489	.9995723
36	.9340790	.9596233	.9763535	.9867597	.9929124	.9963730	.9982259	.9991706
37	.9058096	.9400757	.9635371	.9787834	.9881962	.9937218	.9968490	.9984450
38	.8696832	.9139484	.9456316	.9671424	.9810097	.9895058	.9944561	.9972007
39	.8251993	.8802995	.9215279	.9507021	.9704581	.9830457	.9906968	.9951804
40	.7723906	.8385194	.8902454	.9285779	.9555218	.9735035	.9849039	.9917776
41	.7119167	.7884783	.8510821	.8995520	.9351266	.9599035	.9766928	.9865968
42	.6450807	.7306382	.8037629	.8629156	.9082488	.9412008	.9639391	.9788453
43	.5737556	.6660689	.7485572	.8182650	.8740472	.9163645	.9468863	.9676494
44	.5002272	.5964540	.6863396	.7656967	.8200554	.8485034	.9239265	.9580273
45	.4269731	.5239145	.6185746	.7058854	.7820618	.8450053	.8943120	.9309612
46	.3564160	.4508377	.5472187	.6400929	.7247015	.7976635	.8572858	.9034971
47	.2906093	.3796383	.4745502	.5700991	.6609877	.7427855	.8135140	.8688666
48	.2314539	.3125246	.4029522	.4980575	.5925184	.6811408	.7601370	.8266266
49	.1787687	.2513028	.3346816	.4262975	.5217095	.6144433	.7008372	.7767577
50	.1361652	.1978320	.2711626	.3571000	.4496161	.5442598	.6358436	.7197646
51	.1004981	.1509954	.2153333	.2924870	.3797808	.4728517	.5669651	.6569922
52	.0722525	.1186985	.1665655	.2340502	.3137194	.4022864	.4959576	.5890853
53	.0505819	.0819672	.1256612	.1828479	.2533390	.3335057	.4253407	.5188780
54	.0344708	.0580709	.0824153	.1393741	.1998122	.2731543	.3571920	.4488893
55	.0228618	.0400615	.0662259	.1035989	.1538220	.2174260	.2934500	.3793249
56	.0147527	.0269043	.0462267	.0750600	.1155157	.1689866	.2356547	.3141789
57	.0092610	.0175844	.0314196	.0529869	.0845836	.1281646	.1848470	.2544618
58	.0056545	.0111838	.0207889	.0364381	.0603609	.0948047	.1415355	.2037799
59	.0033375	.0069189	.0133868	.0243907	.0419652	.0683654	.1057882	.1536197
60	.0019385	.0041636	.0083878	.0158953	.0288416	.0480408	.0770147	.1173569
61	.0010882	.0024368	.0051128	.0100813	.0187321	.0328848	.0546794	.0863815
62	.0005938	.0013667	.0030313	.0062212	.0120300	.0219205	.0378244	.0619002
63	.0003150	.0007673	.0017478	.0037347	.0075058	.0142250	.0254839	.0432560
64	.0001684	.0004187	.0009799	.0021806	.0045600	.0089843	.0167175	.0294455
65	.0000814	.0002158	.0005342	.0012381	.0026948	.0055213	.0106748	.0195198
66	.0000396	.0001096	.0002830	.0006835	.0015488	.0033009	.0066338	.0125942

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$$F(a, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 132

%	.41	.42	.43	.44	.45	.46	.47	.48
77	.0000442	.0001147	.0002607	.0005496	.0011244	.0022624	.0045528	.0109984
78	.0000211	.0000579	.0001448	.0003483	.0007930	.0017123	.0035103	.0084428
79	.0000098	.0000274	.0000725	.0001813	.0004288	.0009614	.0020438	.0051369
80	.0000044	.0000128	.0000353	.0000916	.0002251	.0005842	.0013580	.0034300
81	.0000019	.0000058	.0000166	.0000449	.0001147	.0002774	.0006364	.0015868
82	.0000008	.0000026	.0000076	.0000214	.0000567	.0001425	.0003394	.0008766
83	.0000003	.0000011	.0000034	.0000099	.0000272	.0000710	.0001756	.0004124
84	.0000001	.0000005	.0000015	.0000044	.0000126	.0000343	.0000881	.0002150
85	.0000001	.0000002	.0000006	.0000019	.0000057	.0000161	.0000429	.0001086
86		.0000001	.0000002	.0000006	.0000025	.0000073	.0000208	.0000532
87			.0000001	.0000003	.0000011	.0000032	.0000092	.0000252
88				.0000001	.0000004	.0000014	.0000041	.0000116
89					.0000002	.0000006	.0000017	.0000059
90					.0000001	.0000002	.0000007	.0000028
91						.0000001	.0000003	.0000009
92							.0000001	.0000004
93								.0000001
94								.0000001

%	.49	.50
95	1.00000000	1.00000000
96	1.00000000	1.00000000
97	1.00000000	1.00000000
98	1.00000000	1.00000000
99	1.00000000	1.00000000
100	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	1.00000000	1.00000000
19	1.00000000	1.00000000
20	1.00000000	1.00000000
21	1.00000000	1.00000000
22	1.00000000	1.00000000
23	1.00000000	1.00000000
24	1.00000000	1.00000000
25	1.00000000	1.00000000
26	1.00000000	1.00000000
27	1.00000000	1.00000000
28	1.00000000	1.00000000
29	1.00000000	1.00000000
30	1.00000000	1.00000000
31	1.00000000	1.00000000
32	1.00000000	1.00000000
33	1.00000000	1.00000000
34	1.00000000	1.00000000
35	1.00000000	1.00000000
36	.99999999	1.00000000
37	.99999997	.99999999
38	.99999993	.99999998
39	.99999982	.99999994
40	.99999957	.99999985
41	.99999901	.99999965
42	.99999781	.99999920
43	.99999531	.99999821
44	.99999027	.99999613
45	.99998049	.99999199
46	.99996211	.99998384
47	.99992871	.99996844
48	.99987000	.99994024
49	.99977010	.99989032
50	.99960856	.99980474
51	.99934314	.99962668
52	.99893776	.99934227
53	.99833106	.99897847
54	.99745121	.99854142
55	.99621449	.99775573
56	.99452937	.99641148
57	.99230320	.99510939
58	.98945138	.99306660
59	.98590829	.99042506
60	.98163868	.98711195
61	.97664771	.98308099
62	.97098775	.97832314
63	.96476035	.97287463
64	.95811237	.96682073
65	.95128609	.96029387
66	.94430450	.95346578
67	.93755358	.94634422
68	.93116421	.93906133
69	.92529624	.93179227
70	.92006692	.92453377
71	.91554510	.91767686
72	.91175131	.91191901
73	.90866318	.90888005
74	.90623452	.90574944
75	.90435644	.90693340
76	.90296844	.90409061

$$P(x, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

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n = 132

x	.49	.50
77	.01966827	.0335833
78	.01866827	.0284437
79	.00743392	.0145838
80	.00464497	.0072153
81	.0026705	.0036573
82	.0014497	.0017333
83	.0007803	.0008336
84	.0004280	.0004096
85	.0002613	.0002176
86	.0001339	.0001156
87	.0000655	.0000616
88	.0000313	.0000301
89	.0000145	.0000155
90	.0000065	.0000079
91	.0000028	.0000030
92	.0000012	.0000013
93	.0000005	.0000005
94	.0000002	.0000002
95	.0000001	.0000001
96		.0000001

n = 123

[illegible]

n = 133

[illegible]

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 133

X	.41	.42	.43	.44	.45	.46	.47	.48
76	.0001260	.0003092	.0007165	.0015709	.0032634	.0064331	.0120312	.0214819
77	.0007630	.0001607	.0003872	.0008817	.0019018	.0038806	.0075598	.0139701
78	.0003306	.0000812	.0002032	.0004809	.0010771	.0022874	.0046113	.0088371
79	.000144	.0000398	.0001036	.000247	.0005527	.0011068	.0022742	.0045454
80	.0000666	.0000189	.0000513	.0001310	.0003168	.0007253	.0015752	.0032493
81	.0000029	.0000088	.0000246	.0000654	.0001644	.0003909	.0008815	.0018872
82	.0000013	.0000039	.0000115	.0000317	.0000828	.0002045	.0004790	.0010645
83	.0000005	.0000017	.0000052	.0000149	.0000405	.0001039	.0002526	.0005829
84	.0000002	.0000007	.0000023	.0000068	.0000192	.0000512	.0001293	.0003098
85	.0000001	.0000003	.0000010	.0000030	.0000088	.0000244	.0000642	.0001597
86		.0000001	.0000004	.0000013	.0000039	.0000113	.0000309	.0000798
87			.0000002	.0000005	.0000017	.0000051	.0000144	.0000367
88			.0000001	.0000002	.0000007	.0000022	.0000065	.0000182
89				.0000001	.0000003	.0000009	.0000028	.0000083
90					.0000001	.0000004	.0000012	.0000036
91						.0000001	.0000005	.0000015
92						.0000001	.0000002	.0000006
93							.0000001	.0000003
94								.0000001

X	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	1.0000000	1.0000000
8	1.0000000	1.0000000
9	1.0000000	1.0000000
10	1.0000000	1.0000000
11	1.0000000	1.0000000
12	1.0000000	1.0000000
13	1.0000000	1.0000000
14	1.0000000	1.0000000
15	1.0000000	1.0000000
16	1.0000000	1.0000000
17	1.0000000	1.0000000
18	1.0000000	1.0000000
19	1.0000000	1.0000000
20	1.0000000	1.0000000
21	1.0000000	1.0000000
22	1.0000000	1.0000000
23	1.0000000	1.0000000
24	1.0000000	1.0000000
25	1.0000000	1.0000000
26	1.0000000	1.0000000
27	1.0000000	1.0000000
28	1.0000000	1.0000000
29	1.0000000	1.0000000
30	1.0000000	1.0000000
31	1.0000000	1.0000000
32	1.0000000	1.0000000
33	1.0000000	1.0000000
34	1.0000000	1.0000000
35	1.0000000	1.0000000
36	.9999999	1.0000000
37	.9999998	.9999999
38	.9999995	.9999998
39	.9999987	.9999996
40	.9999969	.9999990
41	.9999928	.9999975
42	.9999840	.9999942
43	.9999653	.9999871
44	.9999274	.9999718
45	.9998528	.9999407
46	.9997112	.9998792
47	.9994508	.9997614
48	.9990877	.9995434
49	.9981905	.9991528
50	.9968619	.9984753
51	.9947173	.9973371
52	.9913640	.9954848
53	.9862835	.9925637
54	.9788234	.9880995
55	.9688204	.9814857
56	.9535508	.9719861
57	.9339402	.9587544
58	.9084877	.9408799
59	.8764440	.9174583
60	.8373079	.8876850
61	.7909329	.8509647
62	.7376113	.8070206
63	.6781178	.7559888
64	.6136988	.6984768
65	.5460037	.6355730
66	.4769608	.5687983
67	.4086153	.5000000
68	.3429500	.4312017
69	.2817155	.3644270
70	.2268928	.3015232
71	.1776079	.2440112
72	.1361027	.1929794
73	.1017636	.1490353
74	.0741946	.1127110
75	.0527180	.0825417

$$F(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

$$n = 133$$

$\sum p$	.49	.50
76	.0364856	.0591201
77	.0245835	.0412456
78	.0161194	.0280139
79	.0102792	.0185141
80	.0063734	.0119005
81	.0038403	.0074363
82	.0022479	.0045152
83	.0012777	.0026629
84	.0007049	.0015247
85	.0003773	.0008472
86	.0001959	.0004566
87	.0000986	.0002386
88	.0000481	.0001208
89	.0000227	.0000593
90	.0000104	.0000282
91	.0000046	.0000129
92	.0000020	.0000058
93	.0000008	.0000025
94	.0000003	.0000010
95	.0000001	.0000004
96		.0000002
97		.0000001

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 134

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.7399145	.9332741	.9031184	.9957894	.9989649	.9997493	.9999402	.9999860
2	.3878797	.7507994	.9131557	.9722801	.9916651	.9976051	.9993370	.9998223
3	.1514118	.5031550	.7692633	.9071399	.9611156	.9850338	.9953180	.9987558
4	.0463150	.2807805	.5734510	.7877162	.9069483	.9629426	.9863194	.9952546
5	.0115401	.1321526	.3751153	.6247526	.8049627	.9095087	.9616723	.9849420
6	.0024174	.0512889	.2156288	.4462086	.6654033	.8208313	.9134381	.9616266
7	.0004348	.0186854	.1095786	.3900547	.5074809	.6991357	.8353819	.9180369
8	.0000682	.0057721	.0496032	.1695565	.3554955	.5570958	.7270496	.8487265
9	.0000095	.0015885	.0201565	.0898519	.2285076	.4131670	.5995795	.7530481
10	.0000012	.0003932	.0074064	.0433576	.1349376	.2845499	.4643078	.6365700
11	.0000001	.0000882	.0024772	.0191418	.0733784	.1819298	.3370361	.5099634
12		.0000181	.0007581	.0077677	.0360552	.1080910	.2290479	.3850589
13		.0000034	.0002139	.0029100	.0171519	.0597816	.1437345	.2752440
14		.0000006	.0000558	.0001016	.0044200	.0140434	.0468845	.1049763
15		.0000001	.0000135	.0003265	.0029930	.0148790	.0486004	.1171354
16			.0000030	.0000985	.0011290	.0067269	.0255475	.0699417
17			.0000006	.0000278	.0003994	.0028569	.0126423	.0394197
18			.0000001	.0000074	.0001328	.0011422	.0058999	.0209978
19				.0000015	.0000416	.0004308	.0026012	.0105845
20				.0000004	.0000123	.0001536	.0010853	.0050565
21				.0000001	.0000034	.0000519	.0004293	.0022925
22					.0000009	.0000166	.0001612	.0009877
23					.0000002	.0000051	.0000576	.0004050
24					.0000001	.0000015	.0000196	.0001582
25						.0000004	.0000063	.0000590
26						.0000001	.0000020	.0000210
27							.0000006	.0000071
28							.0000002	.0000023
29								.0000007
30								.0000002
31								.0000001

x	.09	.10	.11	.12	.13	.14	.15	.16
1	.9999960	.9999993	.9999998	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	.9999537	.9999883	.9999971	.9999993	.9999998	1.0000000	1.0000000	1.0000000
3	.9999707	.9999970	.9999974	.9999993	.9999998	.9999996	.9999999	1.0000000
4	.9998438	.9995097	.9990522	.9995571	.9999880	.9999967	.9999991	.9999998
5	.9944492	.9980638	.9993569	.9997257	.9999377	.9999817	.9999948	.9999986
6	.9841899	.9938870	.9977653	.9992232	.9997421	.9999179	.9999749	.9999926
7	.9623749	.9839050	.9935359	.9975449	.9991130	.9996948	.9998994	.9999681
8	.9289229	.9636362	.9903973	.9931600	.9973973	.9990306	.9996556	.9998829
9	.8609812	.9278773	.9653226	.9843007	.9933253	.9973140	.9989727	.9996253
10	.7752157	.8722524	.9327707	.9670057	.9848071	.9934019	.9977856	.9989383
11	.6691870	.7949955	.8826342	.9375256	.9680964	.9854411	.9935641	.9973027
12	.5509771	.6902293	.8127812	.8922090	.9420961	.9708324	.9861607	.9937906
13	.4311434	.5880234	.7248676	.8288687	.9010485	.9464562	.9727694	.9869336
14	.3199200	.4731078	.6216442	.7470109	.8434875	.9059200	.9505920	.9746765
15	.2248475	.3627524	.5119986	.6522785	.7691497	.8568198	.9167667	.9544981
16	.1496233	.2646587	.4035851	.5480613	.6802861	.7885830	.8690134	.9237500
17	.0942936	.1835951	.3039268	.4421638	.5815274	.7059648	.8063371	.8801903
18	.0563089	.1210755	.2184301	.3421185	.4790963	.6126097	.7295641	.8259988
19	.0318902	.0759224	.1497446	.2536421	.3790685	.5138270	.6415010	.7512949
20	.0171458	.0452923	.0979157	.1798157	.2888477	.4156488	.5466219	.6683752
21	.0087609	.0257230	.0610822	.1219291	.2108665	.3237495	.4503474	.5775583
22	.0042591	.0139194	.0363689	.0790780	.1476108	.2425361	.3581181	.4833624
23	.0019723	.0071829	.0206801	.0490646	.0990618	.1746293	.2745199	.3917791
24	.0008709	.0035381	.0112377	.0291147	.0637359	.1207983	.2065811	.3065633
25	.0003671	.0016650	.0058402	.0165653	.0393224	.0802686	.1440479	.2314923
26	.0001479	.0007493	.0029049	.0099236	.0232712	.0512379	.0988209	.1685756
27	.0000570	.0003288	.0013840	.0044222	.0132142	.0312354	.0648392	.1183744
28	.0000210	.0001332	.0006320	.0023605	.0072063	.0185243	.0400339	.0800554
29	.0000074	.0000527	.0002769	.0011531	.0037745	.0104986	.0250305	.0521925
30	.0000025	.0000200	.0001165	.0005242	.0019002	.0057230	.0146885	.0327937
31	.0000008	.0000073	.0000471	.0002327	.0009199	.0030021	.0083008	.0198611
32	.0000003	.0000026	.0000183	.0000994	.0004285	.0015151	.0045191	.0115970
33	.0000001	.0000009	.0000068	.0000408	.0001922	.0007375	.0023710	.0065303
34		.0000003	.0000023	.0000161	.0000830	.0003457	.0011994	.0035473
35		.0000001	.0000009	.0000062	.0000346	.0001562	.0005852	.0018595
36			.0000003	.0000023	.0000139	.0000681	.0002755	.0009409
37			.0000001	.0000008	.0000054	.0000286	.0001252	.0004597
38				.0000003	.0000020	.0000116	.0000549	.0002179
39				.0000001	.0000007	.0000046	.0000233	.0000909
40					.0000003	.0000017	.0000095	.0000436
41					.0000001	.0000006	.0000038	.0000186
42						.0000002	.0000014	.0000077
43						.0000001	.0000005	.0000031
44							.0000002	.0000012
45							.0000001	.0000004
46								.0000002
47								.0000001

x	.17	.18	.19	.20	.21	.22	.23	.24
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	.9999996	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	.9999979	.9999994	.9999998	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	.9999903	.9999972	.9999992	.9999998	.9999999	1.0000000	1.0000000	1.0000000
8	.9999618	.9999880	.9999964	.9999996	.9999997	.9999999	1.0000000	1.0000000
9	.9998693	.9999563	.9999860	.9999957	.9999987	.9999996	.9999999	1.0000000
10	.9996040	.9998588	.9999517	.9999842	.9999950	.9999985	.9999996	.9999999
11	.9992247	.9995912	.9998514	.9999483	.9999827	.9999945	.9999983	.9999995

$$P(n, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 134

x	.17	.18	.19	.20	.21	.22	.23	.24
12	.9973564	.9989290	.9995860	.9998470	.9999459	.9999816	.9999940	.9999981
13	.9940639	.9974390	.9989480	.9995876	.9998455	.9999445	.9999809	.9999937
14	.9877351	.9943696	.9975435	.9989791	.9995950	.9998464	.9999442	.9999806
15	.9765317	.9885463	.9946961	.9976641	.9990195	.9996071	.9998494	.9999447
16	.9581744	.9783200	.9893529	.9950342	.9977958	.9990671	.9996229	.9998542
17	.9302099	.9616243	.9800311	.9901442	.9953763	.9979343	.9991197	.9996416
18	.8904531	.9361655	.9648536	.9816506	.9909122	.9957166	.9980763	.9991755
19	.8375239	.8998887	.9417125	.9678696	.9831988	.9916509	.9960506	.9982189
20	.7713372	.8512445	.9085723	.9468231	.9706805	.9846497	.9923564	.9963746
21	.6933885	.7898461	.8638738	.9165689	.9515467	.9732953	.9860114	.9930257
22	.6067191	.7166814	.8069562	.8755055	.9239358	.9559101	.9757230	.9872847
23	.5155406	.6341885	.7383804	.8227855	.8862369	.9307238	.9599380	.9779728
24	.4246010	.5460096	.6600501	.7585998	.8374380	.8961313	.9369781	.9636533
25	.3384549	.4564864	.5750714	.6843851	.7774430	.8510057	.9052591	.9427394
26	.2678196	.3781201	.4873651	.6027490	.7072717	.7950038	.8635713	.9136800
27	.1941568	.2904485	.4011163	.5171880	.6290721	.7287046	.8113678	.8752086
28	.1395415	.2205806	.3201915	.4316270	.5459231	.6540757	.7489948	.8266132
29	.0967940	.1619720	.2476518	.3498857	.4614584	.5735516	.6777982	.7679699
30	.0647911	.1149471	.1854572	.2751910	.3793902	.4905356	.6006544	.7002799
31	.0418493	.0788182	.1343962	.2098332	.3030356	.4085838	.5107993	.6254647
32	.0260851	.0522118	.0942145	.1550170	.2349431	.3310381	.4373630	.5462038
33	.0156924	.0334130	.0638766	.1109070	.1766820	.2606380	.3590664	.4656392
34	.0091130	.0206581	.0418808	.0768221	.1280127	.1992636	.2867785	.3870021
35	.0051099	.0123410	.0265540	.0515090	.0910127	.1478406	.2263660	.3313241
36	.0027673	.0071246	.0162821	.0334282	.0623038	.1064007	.1678948	.2466765
37	.0014478	.0037757	.0086661	.0209977	.0413173	.0742581	.1229280	.1889765
38	.0007320	.0021449	.0055394	.0127667	.0265413	.0502461	.0873537	.1405316
39	.0003577	.0011190	.0030745	.0075140	.0165151	.0329580	.0602286	.1015612
40	.0001691	.0005647	.0016513	.0042815	.0099546	.0209552	.0402845	.0712683
41	.0000773	.0002757	.0008584	.0023623	.0058127	.0129149	.0261358	.0485487
42	.0000342	.0001303	.0004320	.0012622	.0032085	.0077156	.0164464	.0320996
43	.0000146	.0000596	.0002105	.0006533	.0018027	.0044684	.0100378	.0205975
44	.0000061	.0000264	.0000993	.0003275	.0009577	.0025089	.0065421	.0128263
45	.0000024	.0000113	.0000454	.0001591	.0004931	.0013658	.0034119	.0077508
46	.0000009	.0000047	.0000201	.0000749	.0002462	.0007210	.0019004	.0045452
47	.0000004	.0000019	.0000086	.0000342	.0001191	.0003691	.0009269	.0025867
48	.0000001	.0000007	.0000036	.0000151	.0000559	.0001833	.0005383	.0014286
49	.0000000	.0000003	.0000014	.0000065	.0000254	.0000883	.0002730	.0007458
50	.0000000	.0000001	.0000006	.0000027	.0000112	.0000413	.0001352	.0003988
51	.0000000	.0000000	.0000002	.0000011	.0000048	.0000167	.0000647	.0002012
52	.0000000	.0000000	.0000001	.0000004	.0000020	.0000082	.0000301	.0000987
53	.0000000	.0000000	.0000000	.0000002	.0000008	.0000035	.0000136	.0000470
54	.0000000	.0000000	.0000000	.0000001	.0000003	.0000015	.0000060	.0000217
55	.0000000	.0000000	.0000000	.0000000	.0000006	.0000025	.0000097	.0000369
56	.0000000	.0000000	.0000000	.0000000	.0000002	.0000010	.0000042	.0000168
57	.0000000	.0000000	.0000000	.0000000	.0000001	.0000004	.0000018	.0000076
58	.0000000	.0000000	.0000000	.0000000	.0000000	.0000001	.0000003	.0000013
59	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
60	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000

x	.25	.26	.27	.28	.29	.30	.31	.32
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	.99999994	.99999998	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	.99999980	.99999994	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
14	.99999965	.99999979	.99999994	.99999998	.99999999	1.00000000	1.00000000	1.00000000
15	.99999950	.99999964	.99999979	.99999993	.99999998	.99999999	1.00000000	1.00000000
16	.99999936	.99999950	.99999965	.99999979	.99999993	.99999998	.99999999	1.00000000
17	.99999922	.99999936	.99999950	.99999965	.99999979	.99999993	.99999998	.99999999
18	.99999908	.99999922	.99999936	.99999950	.99999965	.99999979	.99999993	.99999998
19	.99999894	.99999908	.99999922	.99999936	.99999950	.99999965	.99999979	.99999993
20	.99999880	.99999894	.99999908	.99999922	.99999936	.99999950	.99999965	.99999979
21	.99999866	.99999880	.99999894	.99999908	.99999922	.99999936	.99999950	.99999965
22	.99999852	.99999866	.99999880	.99999894	.99999908	.99999922	.99999936	.99999950
23	.99999838	.99999852	.99999866	.99999880	.99999894	.99999908	.99999922	.99999936
24	.99999824	.99999838	.99999852	.99999866	.99999880	.99999894	.99999908	.99999922
25	.99999810	.99999824	.99999838	.99999852	.99999866	.99999880	.99999894	.99999908
26	.99999796	.99999810	.99999824	.99999838	.99999852	.99999866	.99999880	.99999894
27	.99999782	.99999796	.99999810	.99999824	.99999838	.99999852	.99999866	.99999880
28	.99999768	.99999782	.99999796	.99999810	.99999824	.99999838	.99999852	.99999866
29	.99999754	.99999768	.99999782	.99999796	.99999810	.99999824	.99999838	.99999852
30	.99999740	.99999754	.99999768	.99999782	.99999796	.99999810	.99999824	.99999838
31	.99999726	.99999740	.99999754	.99999768	.99999782	.99999796	.99999810	.99999824
32	.99999712	.99999726	.99999740	.99999754	.99999768	.99999782	.99999796	.99999810
33	.99999698	.99999712	.99999726	.99999740	.99999754	.99999768	.99999782	.99999796
34	.99999684	.99999698	.99999712	.99999726	.99999740	.99999754	.99999768	.99999782
35	.99999670	.99999684	.99999698	.99999712	.99999726	.99999740	.99999754	.99999768
36	.99999656	.99999670	.99999684	.99999698	.99999712	.99999726	.99999740	.99999754
37	.99999642	.99999656	.99999670	.99999684	.99999698	.99999712	.99999726	.99999740
38	.99999628	.99999642	.99999656	.99999670	.99999684	.99999698	.99999712	.99999726
39	.99999614	.99999628	.99999642	.99999656	.99999670	.99999684	.99999698	.99999712
40	.99999600	.99999614	.99999628	.99999642	.99999656	.99999670	.99999684	.99999698
41	.99999586	.99999600	.99999614	.99999628	.99999642	.99999656	.99999670	.99999684
42	.99999572	.99999586	.99999600	.99999614	.99999628	.99999642	.99999656	.99999670
43	.99999558	.99999572	.99999586	.99999600	.99999614	.99999628	.99999642	.99999656
44	.99999544	.99999558	.99999572	.99999586	.99999600	.99999614	.99999628	.99999642
45	.99999530	.99999544	.99999558	.99999572	.99999586	.99999600	.99999614	.99999628
46	.99999516	.99999530	.99999544	.99999558	.99999572	.99999586	.99999600	.99999614
47	.99999502	.99999516	.99999530	.99999544	.99999558	.99999572	.99999586	.99999600
48	.99999488	.99999502	.99999516	.99999530	.99999544	.99999558	.99999572	.99999586
49	.99999474	.99999488	.99999502	.99999516	.99999530	.99999544	.99999558	.99999572
50	.99999460	.99999474	.99999488	.99999502	.99999516	.99999530	.99999544	.99999558
51	.99999446	.99999460	.99999474	.99999488	.99999502	.99999516	.99999530	.99999544
52	.99999432	.99999446	.99999460	.99999474	.99999488	.99999502	.99999516	.99999530
53	.99999418	.99999432	.99999446	.99999460	.99999474	.99999488	.99999502	.99999516
54	.99999404	.99999418	.99999432	.99999446	.99999460	.99999474	.99999488	.99999502
55	.99999390	.99999404	.99999418	.99999432	.99999446	.99999460	.99999474	.99999488
56	.99999376	.99999390	.99999404	.99999418	.99999432	.99999446	.99999460	.99999474
57	.99999362	.99999376	.9999939					

$$P(e, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 134

p	.25	.26	.27	.28	.29	.30	.31	.32
45	.0161267	.0309329	.0550211	.0912511	.1410259	.2075705	.2874304	.3782947
46	.0099360	.0199029	.0371935	.0644166	.1043379	.1580064	.2281484	.3100370
47	.0059434	.0125302	.0244350	.0442259	.0747185	.1103640	.1664000	.2494176
48	.0034516	.0076424	.0156603	.0295244	.0520562	.0859133	.1333091	.1953009
49	.0019461	.0045240	.0096707	.0191619	.0352834	.0607055	.0980170	.1491426
50	.0010654	.0026910	.0058341	.0120891	.0232594	.0417444	.0701090	.1110190
51	.0005663	.0014524	.0034167	.0074132	.0149103	.0279300	.0489356	.0805202
52	.0002923	.0007877	.0019440	.0044181	.0092936	.0181706	.0332079	.0568009
53	.0001465	.0004149	.0010747	.0025590	.0056317	.0115080	.0219293	.0391247
54	.0000743	.0002123	.0005772	.0014405	.0033176	.0070084	.0140095	.0261968
55	.0000337	.0001055	.0003012	.0007480	.0017990	.0042415	.0088062	.0170712
56	.0000155	.0000509	.0001527	.0004189	.0010575	.0024690	.0053336	.0108248
57	.0000072	.0000239	.0000752	.0002164	.0005722	.0013973	.0031653	.0066701
58	.0000030	.0000109	.0000360	.0001096	.0003029	.0007690	.0018200	.0040077
59	.0000013	.0000048	.0000167	.0000510	.0001518	.0004113	.0010176	.0023394
60	.0000005	.0000021	.0000076	.0000251	.0000764	.0002130	.0005532	.0013361
61	.0000002	.0000009	.0000033	.0000116	.0000369	.0001081	.0002924	.0007333
62	.0000001	.0000004	.0000014	.0000052	.0000173	.0000531	.0001502	.0003936
63		.0000001	.0000006	.0000022	.0000079	.0000254	.0000751	.0002055
64		.0000001	.0000002	.0000010	.0000036	.0000110	.0000364	.0001043
65			.0000001	.0000004	.0000015	.0000053	.0000172	.0000515
66				.0000002	.0000006	.0000023	.0000074	.0000247
67				.0000001	.0000003	.0000010	.0000035	.0000115
68					.0000001	.0000004	.0000015	.0000052
69						.0000002	.0000008	.0000023
70						.0000001	.0000005	.0000010
71							.0000001	.0000004
72								.0000002
73								.0000001

p	.33	.34	.35	.36	.37	.39	.39	.40
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
14	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
15	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
16	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
17	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
18	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
19	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
20	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
21	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
22	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000
23	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000
24	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000
25	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000
26	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
27	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
28	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
29	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
30	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
31	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
32	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
33	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
34	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
35	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
36	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
37	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
38	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
39	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
40	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
41	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
42	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
43	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
44	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
45	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
46	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
47	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
48	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
49	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
50	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
51	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
52	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
53	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
54	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
55	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
56	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
57	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
58	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
59	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
60	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
61	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
62	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
63	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 124

x	.33	.34	.35	.36	.37	.38	.39	.40
64	.0002749	.0006844	.0015806	.0034204	.0069346	.0133217	.0240989	.0412673
65	.0001426	.0003679	.0008857	.0019940	.0042230	.0084099	.0158024	.0280817
66	.0000715	.0001823	.0004427	.0011331	.0024953	.0051677	.0100900	.0186151
67	.0000348	.0000977	.0002558	.0006257	.0014345	.0030905	.0062719	.0120172
68	.0000165	.0000483	.0001318	.0003360	.0008022	.0017982	.0037443	.0075520
69	.0000076	.0000232	.0000660	.0001755	.0004363	.0010179	.0022336	.0046205
70	.0000034	.0000108	.0000322	.0000891	.0002308	.0005604	.0012791	.0027506
71	.0000015	.0000049	.0000152	.0000440	.0001187	.0003000	.0007125	.0015930
72	.0000006	.0000022	.0000070	.0000211	.0000593	.0001522	.0003859	.0008973
73	.0000003	.0000009	.0000031	.0000098	.0000288	.0000750	.0002032	.0004915
74	.0000001	.0000004	.0000014	.0000045	.0000136	.0000389	.0001040	.0002618
75		.0000002	.0000006	.0000020	.0000062	.0000186	.0000518	.0001355
76		.0000001	.0000002	.0000008	.0000028	.0000086	.0000250	.0000682
77			.0000001	.0000003	.0000012	.0000039	.0000110	.0000333
78				.0000001	.0000005	.0000017	.0000054	.0000158
79				.0000001	.0000002	.0000007	.0000024	.0000073
80					.0000001	.0000003	.0000010	.0000033
81						.0000001	.0000002	.0000006
82							.0000001	.0000002
83								.0000001
84								

x	.41	.42	.43	.44	.45	.46	.47	.48
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
14	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
15	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
16	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
17	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
18	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
19	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
20	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
21	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
22	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
23	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
24	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
25	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
26	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
27	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
28	.9999998	.9999998	.9999998	.9999998	.9999998	.9999998	.9999998	.9999998
29	.9999997	.9999997	.9999997	.9999997	.9999997	.9999997	.9999997	.9999997
30	.9999996	.9999996	.9999996	.9999996	.9999996	.9999996	.9999996	.9999996
31	.9999995	.9999995	.9999995	.9999995	.9999995	.9999995	.9999995	.9999995
32	.9999994	.9999994	.9999994	.9999994	.9999994	.9999994	.9999994	.9999994
33	.9999993	.9999993	.9999993	.9999993	.9999993	.9999993	.9999993	.9999993
34	.9999992	.9999992	.9999992	.9999992	.9999992	.9999992	.9999992	.9999992
35	.9999991	.9999991	.9999991	.9999991	.9999991	.9999991	.9999991	.9999991
36	.9999990	.9999990	.9999990	.9999990	.9999990	.9999990	.9999990	.9999990
37	.9999989	.9999989	.9999989	.9999989	.9999989	.9999989	.9999989	.9999989
38	.9999988	.9999988	.9999988	.9999988	.9999988	.9999988	.9999988	.9999988
39	.9999987	.9999987	.9999987	.9999987	.9999987	.9999987	.9999987	.9999987
40	.9999986	.9999986	.9999986	.9999986	.9999986	.9999986	.9999986	.9999986
41	.9999985	.9999985	.9999985	.9999985	.9999985	.9999985	.9999985	.9999985
42	.9999984	.9999984	.9999984	.9999984	.9999984	.9999984	.9999984	.9999984
43	.9999983	.9999983	.9999983	.9999983	.9999983	.9999983	.9999983	.9999983
44	.9999982	.9999982	.9999982	.9999982	.9999982	.9999982	.9999982	.9999982
45	.9999981	.9999981	.9999981	.9999981	.9999981	.9999981	.9999981	.9999981
46	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980
47	.9999979	.9999979	.9999979	.9999979	.9999979	.9999979	.9999979	.9999979
48	.9999978	.9999978	.9999978	.9999978	.9999978	.9999978	.9999978	.9999978
49	.9999977	.9999977	.9999977	.9999977	.9999977	.9999977	.9999977	.9999977
50	.9999976	.9999976	.9999976	.9999976	.9999976	.9999976	.9999976	.9999976
51	.9999975	.9999975	.9999975	.9999975	.9999975	.9999975	.9999975	.9999975
52	.9999974	.9999974	.9999974	.9999974	.9999974	.9999974	.9999974	.9999974
53	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
54	.9999972	.9999972	.9999972	.9999972	.9999972	.9999972	.9999972	.9999972
55	.9999971	.9999971	.9999971	.9999971	.9999971	.9999971	.9999971	.9999971
56	.9999970	.9999970	.9999970	.9999970	.9999970	.9999970	.9999970	.9999970
57	.9999969	.9999969	.9999969	.9999969	.9999969	.9999969	.9999969	.9999969
58	.9999968	.9999968	.9999968	.9999968	.9999968	.9999968	.9999968	.9999968
59	.9999967	.9999967	.9999967	.9999967	.9999967	.9999967	.9999967	.9999967
60	.9999966	.9999966	.9999966	.9999966	.9999966	.9999966	.9999966	.9999966
61	.9999965	.9999965	.9999965	.9999965	.9999965	.9999965	.9999965	.9999965
62	.9999964	.9999964	.9999964	.9999964	.9999964	.9999964	.9999964	.9999964
63	.9999963	.9999963	.9999963	.9999963	.9999963	.9999963	.9999963	.9999963
64	.9999962	.9999962	.9999962	.9999962	.9999962	.9999962	.9999962	.9999962
65	.9999961	.9999961	.9999961	.9999961	.9999961	.9999961	.9999961	.9999961
66	.9999960	.9999960	.9999960	.9999960	.9999960	.9999960	.9999960	.9999960
67	.9999959	.9999959	.9999959	.9999959	.9999959	.9999959	.9999959	.9999959
68	.9999958	.9999958	.9999958	.9999958	.9999958	.9999958	.9999958	.9999958
69	.9999957	.9999957	.9999957	.9999957	.9999957	.9999957	.9999957	.9999957
70	.9999956	.9999956	.9999956	.9999956	.9999956	.9999956	.9999956	.9999956
71	.9999955	.9999955	.9999955	.9999955	.9999955	.9999955	.9999955	.9999955

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$$P(r, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 134

r	.41	.42	.43	.44	.45	.46	.47	.48
72	.0019671	.0040736	.0079841	.0148358	.0261800	.0439446	.0702768	.1072477
73	.0011201	.0024099	.0049039	.0094849	.0173005	.0300905	.0498241	.0786600
74	.0006203	.0013868	.0029304	.0058643	.0113022	.0200671	.0344197	.0562478
75	.0003339	.0007759	.0017032	.0035385	.0069686	.0130287	.0231591	.0391939
76	.0001747	.0004220	.0009425	.0020766	.0042447	.0082322	.0151704	.0266003
77	.0000888	.0002231	.0005288	.0011850	.0025145	.0050602	.0096707	.0175758
78	.0000439	.0001146	.0002823	.0006572	.0014482	.0030249	.0059971	.0113010
79	.0000211	.0000572	.0001464	.0003542	.0008107	.0017579	.0036164	.0070643
80	.0000098	.0000277	.0000738	.0001855	.0004409	.0009928	.0021199	.0042984
81	.0000044	.0000130	.0000361	.0000943	.0002329	.0005447	.0012076	.0025410
82	.0000019	.0000060	.0000171	.0000466	.0001195	.0002903	.0006682	.0014594
83	.0000008	.0000026	.0000079	.0000223	.0000545	.0001508	.0003590	.0008141
84	.0000003	.0000011	.0000035	.0000104	.0000258	.0000754	.0001872	.0004409
85	.0000001	.0000005	.0000015	.0000047	.0000135	.0000367	.0000948	.0002317
86	.0000001	.0000002	.0000006	.0000020	.0000061	.0000174	.0000465	.0001188
87		.0000001	.0000003	.0000009	.0000027	.0000079	.0000203	.0000504
88			.0000001	.0000004	.0000012	.0000035	.0000102	.0000280
89				.0000001	.0000005	.0000015	.0000046	.0000130
90				.0000001	.0000002	.0000006	.0000020	.0000058
91					.0000001	.0000003	.0000008	.0000025
92						.0000001	.0000003	.0000011
93							.0000001	.0000004
94								.0000002
95								.0000001

r	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	1.0000000	1.0000000
8	1.0000000	1.0000000
9	1.0000000	1.0000000
10	1.0000000	1.0000000
11	1.0000000	1.0000000
12	1.0000000	1.0000000
13	1.0000000	1.0000000
14	1.0000000	1.0000000
15	1.0000000	1.0000000
16	1.0000000	1.0000000
17	1.0000000	1.0000000
18	1.0000000	1.0000000
19	1.0000000	1.0000000
20	1.0000000	1.0000000
21	1.0000000	1.0000000
22	1.0000000	1.0000000
23	1.0000000	1.0000000
24	1.0000000	1.0000000
25	1.0000000	1.0000000
26	1.0000000	1.0000000
27	1.0000000	1.0000000
28	1.0000000	1.0000000
29	1.0000000	1.0000000
30	1.0000000	1.0000000
31	1.0000000	1.0000000
32	1.0000000	1.0000000
33	1.0000000	1.0000000
34	1.0000000	1.0000000
35	1.0000000	1.0000000
36	.9999999	1.0000000
37	.9999999	1.0000000
38	.9999999	.9999999
39	.9999999	.9999997
40	.9999998	.9999993
41	.9999998	.9999992
42	.9999998	.9999995
43	.9999997	.9999996
44	.9999996	.9999994
45	.9999994	.9999993
46	.9999996	.9999999
47	.9999998	.9999999
48	.9999998	.9999999
49	.9999998	.9999999
50	.9999998	.9999999
51	.9999998	.9999999
52	.9999998	.9999999
53	.9999998	.9999999
54	.9999998	.9999999
55	.9999998	.9999999
56	.9999998	.9999999
57	.9999998	.9999999
58	.9999998	.9999999
59	.9999998	.9999999
60	.9999998	.9999999
61	.9999998	.9999999
62	.9999998	.9999999
63	.9999998	.9999999
64	.9999998	.9999999
65	.9999998	.9999999
66	.9999998	.9999999
67	.9999998	.9999999
68	.9999998	.9999999
69	.9999998	.9999999
70	.9999998	.9999999

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n = 134

$$P(x, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

x	.49	.50
71	.2014635	.2737678
72	.1864408	.2184953
73	.1183898	.1710074
74	.0877035	.1306751
75	.0632414	.0974283
76	.0444395	.0708309
77	.0304133	.0501829
78	.0202663	.0346298
79	.0131404	.0232641
80	.0082072	.0152074
81	.0050815	.0096684
82	.0030282	.0059738
83	.0017531	.0035691
84	.0009855	.0020938
85	.0005378	.0011639
86	.0002848	.0006519
87	.0001462	.0003476
88	.0000728	.0001797
89	.0000351	.0000901
90	.0000164	.0000437
91	.0000074	.0000206
92	.0000033	.0000094
93	.0000014	.0000041
94	.0000006	.0000018
95	.0000002	.0000007
96	.0000001	.0000003
97		.0000001

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$$F(n, p, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 135

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.7425154	.9344087	.9936249	.9939578	.9990167	.9997644	.9999444	.9999871
2	.1914000	.7544489	.9152546	.972205	.9920301	.9977338	.9993793	.9999154
3	.1537765	.4081079	.7735801	.9097455	.9673911	.9890499	.9965893	.999515
4	.0473359	.0852280	.5793253	.7924911	.9099067	.9644768	.9870193	.9955443
5	.0118918	.1351252	.3810653	.6312711	.8100620	.9127148	.9633976	.9857670
6	.0085087	.0540661	.2204134	.4552709	.6723013	.8661519	.9168145	.9634918
7	.0004543	.0197774	.1127601	.292094	.5153771	.7064374	.8408438	.918615
8	.0000719	.0060104	.0514024	.1743764	.3630947	.5656182	.7354698	.8548713
9	.0000101	.0016732	.0210399	.0930401	.2348570	.4210028	.6085654	.7607024
10	.0000013	.0004171	.0077089	.0483173	.1396161	.2922669	.4737768	.6456888
11	.0000001	.0000943	.0026251	.0201104	.0764564	.1880870	.3459451	.5200919
12		.0000195	.000102	.0002226	.0386814	.1128213	.2368071	.3957878
13		.0000037	.0000303	.0001043	.001171	.0036801	.1515665	.2840938
14		.0000006	.0000065	.0001085	.0079066	.0325797	.0910040	.1921977
15		.0000001	.0000148	.0003538	.0032144	.0158368	.0512809	.1225627
16			.0000034	.0001076	.0012222	.0072161	.0271612	.0737178
17			.0000007	.0000089	.0001461	.0012451	.0063719	.0234710
18			.0000001	.0000021	.0000462	.0004735	.0028321	.0114175
19				.0000005	.0000138	.0001703	.0011914	.0054987
20					.0000001	.0000039	.0000580	.0004752
21						.0000018	.0000180	.0001800
22						.0000003	.0000058	.0000454
23						.0000001	.0000017	.0000222
24						.0000005	.0000073	.0000669
25							.0000001	.0000023
26							.0000002	.0000027
27							.0000001	.0000009
28								.0000003
29								.0000001
30								.0000003
31								.0000001
32								
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$$P(n, r) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 125

r	.41	.42	.43	.44	.45	.46	.47	.48
70	.0009966	.0132347	.0237847	.0403776	.0653418	.1008141	.1484308	.2090007
71	.0048717	.0083889	.0156010	.0272849	.0441811	.0736663	.1121334	.1630600
72	.0025388	.0041768	.0079908	.0132794	.0217413	.0344746	.0524584	.0761970
73	.0014674	.0023107	.0042284	.0071883	.0113048	.0176779	.0264599	.0380086
74	.0008238	.0012814	.0023780	.0044411	.0075043	.0116264	.0168416	.0233798
75	.0004813	.0007394	.0013309	.0024618	.0041704	.0064386	.0092851	.0134483
76	.0002800	.0004370	.0007183	.0011773	.0018331	.0026319	.0035886	.0046100
77	.0001871	.0002864	.0004593	.0007189	.0010820	.0015611	.0021377	.0027839
78	.0000983	.0001408	.0002193	.0003394	.0005076	.0007176	.0009597	.0012000
79	.0000504	.0000713	.0001030	.0001537	.0002176	.0002947	.0003853	.0004801
80	.0000244	.0000340	.0000490	.0000697	.0000948	.0001234	.0001544	.0001867
81	.0000104	.0000133	.0000173	.0000224	.0000285	.0000356	.0000437	.0000527
82	.0000050	.0000063	.0000082	.0000104	.0000126	.0000150	.0000173	.0000204
83	.0000023	.0000028	.0000035	.0000043	.0000052	.0000061	.0000071	.0000081
84	.0000010	.0000012	.0000015	.0000018	.0000021	.0000024	.0000027	.0000030
85	.0000004	.0000005	.0000006	.0000007	.0000008	.0000009	.0000010	.0000011
86	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001
87			.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
88			.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
89			.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
90			.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
91				.0000000	.0000000	.0000000	.0000000	.0000000
92				.0000000	.0000000	.0000000	.0000000	.0000000
93				.0000000	.0000000	.0000000	.0000000	.0000000
94				.0000000	.0000000	.0000000	.0000000	.0000000
95				.0000000	.0000000	.0000000	.0000000	.0000000

r	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	1.00000000	1.00000000
19	1.00000000	1.00000000
20	1.00000000	1.00000000
21	1.00000000	1.00000000
22	1.00000000	1.00000000
23	1.00000000	1.00000000
24	1.00000000	1.00000000
25	1.00000000	1.00000000
26	1.00000000	1.00000000
27	1.00000000	1.00000000
28	1.00000000	1.00000000
29	1.00000000	1.00000000
30	1.00000000	1.00000000
31	1.00000000	1.00000000
32	1.00000000	1.00000000
33	1.00000000	1.00000000
34	1.00000000	1.00000000
35	1.00000000	1.00000000
36	1.00000000	1.00000000
37	.99999999	1.00000000
38	.99999999	.99999999
39	.99999999	.99999999
40	.99999999	.99999999
41	.99999999	.99999999
42	.99999999	.99999999
43	.99999999	.99999999
44	.99999999	.99999999
45	.99999999	.99999999
46	.99999999	.99999999
47	.99999999	.99999999
48	.99999999	.99999999
49	.99999999	.99999999
50	.99999999	.99999999
51	.99999999	.99999999
52	.99999999	.99999999
53	.99999999	.99999999
54	.99999999	.99999999
55	.99999999	.99999999
56	.99999999	.99999999
57	.99999999	.99999999
58	.99999999	.99999999
59	.99999999	.99999999
60	.99999999	.99999999
61	.99999999	.99999999
62	.99999999	.99999999
63	.99999999	.99999999
64	.99999999	.99999999
65	.99999999	.99999999
66	.99999999	.99999999
67	.99999999	.99999999

$$P(x, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 155

x	.49	.50
68	.4079458	.5000000
69	.3487898	.4317076
70	.2880088	.3485947
71	.2267349	.2680711
72	.1785016	.2046318
73	.1371365	.147813
74	.1028377	.100413
75	.0758879	.0740517
76	.0536328	.0541296
77	.0378873	.0401060
78	.0253394	.0284063
79	.0164381	.0189469
80	.0106653	.0129358
81	.0064523	.0084379
82	.0040343	.0052821
83	.0023779	.0030884
84	.0013616	.0018414
85	.0007578	.0010398
86	.0004087	.0005189
87	.0002141	.0002997
88	.0001080	.0001637
89	.0000536	.0000849
90	.0000254	.0000469
91	.0000118	.0000221
92	.0000053	.0000110
93	.0000023	.0000057
94	.0000010	.0000029
95	.0000004	.0000013
96	.0000002	.0000005
97	.0000001	.0000002
98		.0000001

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 136

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.7450902	.9359165	.9841161	.9961195	.9990659	.9997785	.9999403	.9999881
2	.1949112	.7580521	.7173057	.9741300	.9923794	.9978586	.9994188	.9998475
3	.1561527	.5130347	.7778303	.9122645	.9686249	.9895709	.9967288	.9990222
4	.0484301	.2896856	.5851530	.7971832	.9127410	.9685907	.9895204	.9967650
5	.0124505	.1381272	.3870131	.6377200	.8150542	.9158204	.9650511	.9895492
6	.0026026	.0564713	.2252330	.4623104	.6792653	.8313457	.9200763	.9652738
7	.0004748	.0200872	.1159897	.3027364	.5232273	.7136203	.8461636	.9248815
8	.0000757	.0062973	.0532431	.1792866	.3707089	.5740673	.7428461	.8596516
9	.0000107	.0017593	.0219507	.0962935	.2412689	.4304317	.6174487	.7681879
10	.0000014	.0004422	.0081864	.0471303	.1443782	.3000391	.4832120	.6550734
11	.0000002	.0001008	.0027800	.0211147	.0796144	.1943378	.3548933	.5301556
12		.0000210	.0008647	.0086982	.0405701	.1170553	.2442608	.4057316
13		.0000040	.0002476	.0033090	.0191643	.0656706	.1575193	.2930287
14		.0000007	.0000636	.0011672	.0084181	.0343857	.0952434	.1995494
15		.0000001	.0000161	.0003832	.0034490	.0168414	.0540609	.1281335
16			.0000037	.0001174	.0013218	.0077333	.0286496	.0776248
17			.0000008	.0000337	.0004752	.0033367	.0144987	.0444099
18			.0000002	.0000091	.0001606	.0013558	.0068740	.0240223
19				.0000023	.0000512	.0005198	.0030799	.0123018
20				.0000006	.0000154	.0001885	.0013063	.0059722
21				.0000001	.0000044	.0000647	.0005253	.0027524
22					.0000012	.0000211	.0002006	.0012058
23					.0000003	.0000065	.0000729	.0005028
24					.0000001	.0000019	.0000252	.0001598
25						.0000005	.0000083	.0000758
26						.0000001	.0000026	.0000274
27							.0000000	.0000095
28							.0000002	.0000032
29							.0000001	.0000010
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$$H(n, n) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 176

	.33	.34	.35	.36	.37	.38	.39	.40
62	.0015107	.0033412	.0069158	.0134372	.0245772	.0424317	.0693284	.1074720
63	.0004449	.0019485	.0042011	.0084941	.0161510	.0289579	.0490826	.0788413
64	.0004507	.0011058	.0024841	.0052282	.0103363	.0192579	.0338785	.0564214
65	.0002434	.0006106	.0014295	.0031328	.0064444	.0124767	.0227909	.0393730
66	.0001253	.0003290	.0008005	.0018272	.0039112	.0078729	.0149387	.0267834
67	.0000628	.0001714	.0004362	.0010371	.0023108	.0048375	.0095381	.0177545
68	.0000306	.0000877	.0002312	.0005728	.0013268	.0028937	.0059307	.0114657
69	.0000145	.0000433	.0001192	.0003078	.0007435	.0016849	.0035904	.0072115
70	.0000067	.0000207	.0000598	.0001609	.0004048	.0009547	.0021158	.0044165
71	.0000030	.0000097	.0000292	.0000818	.0002144	.0005264	.0012135	.0026330
72	.0000013	.0000044	.0000138	.0000404	.0001104	.0002823	.0006772	.0015278
73	.0000005	.0000019	.0000064	.0000194	.0000553	.0001473	.0003676	.0008626
74	.0000002	.0000008	.0000029	.0000091	.0000270	.0000747	.0001941	.0004738
75	.0000001	.0000003	.0000012	.0000041	.0000128	.0000369	.0000997	.0002531
76		.0000001	.0000005	.0000018	.0000059	.0000177	.0000490	.0001315
77		.0000001	.0000002	.0000008	.0000026	.0000082	.0000242	.0000664
78			.0000001	.0000003	.0000011	.0000037	.0000114	.0000326
79				.0000001	.0000005	.0000016	.0000052	.0000156
80				.0000001	.0000002	.0000007	.0000023	.0000072
81					.0000001	.0000003	.0000010	.0000032
82						.0000001	.0000004	.0000014
83							.0000002	.0000009
84							.0000001	.0000002
85								.0000001
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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 136

x	.41	.42	.43	.44	.45	.46	.47	.48
70	.0087017	.0162156	.0286358	.0440117	.0765681	.1163625	.16883.3	.2343377
71	.0053889	.0104242	.0190942	.0331802	.0547959	.0861543	.1291933	.1851116
72	.0032889	.0062357	.0124031	.0223475	.0382368	.0622336	.0965151	.1428720
73	.0019064	.0037771	.0078461	.0146636	.0260056	.0438377	.0703541	.1076784
74	.0010885	.0023592	.0048322	.0093706	.0172321	.0300992	.0500150	.0791863
75	.0006046	.0013617	.0028966	.0058300	.0111208	.0201357	.0346594	.0568002
76	.0003266	.0007646	.0016895	.0035303	.0069873	.0131184	.0234025	.0397179
77	.0001716	.0004175	.0009586	.0020800	.0042729	.0083222	.0153902	.0270617
78	.0000876	.0002217	.0005289	.0011921	.0025423	.0051979	.0098537	.0179583
79	.0000435	.0001144	.0002837	.0006644	.0014713	.0030861	.0061399	.0116022
80	.0000210	.0000574	.0001480	.0003600	.0008279	.0018029	.0037220	.0072946
81	.0000098	.0000280	.0000750	.0001896	.0004529	.0010240	.0021942	.0044618
82	.0000045	.0000132	.0000369	.0000970	.0002407	.0005653	.0012576	.0026535
83	.0000020	.0000061	.0000176	.0000482	.0001243	.0003033	.0007005	.0015341
84	.0000008	.0000027	.0000082	.0000233	.0000624	.0001580	.0003790	.0008618
85	.0000004	.0000012	.0000037	.0000109	.0000304	.0000799	.0001992	.0004703
86	.0000001	.0000005	.0000016	.0000050	.0000143	.0000393	.0001016	.0002492
87	.0000001	.0000002	.0000007	.0000022	.0000066	.0000187	.0000503	.0001282
88		.0000001	.0000001	.0000003	.0000009	.0000029	.0000086	.0000248
89			.0000001	.0000004	.0000013	.0000039	.0000113	.0000310
90				.0000002	.0000005	.0000017	.0000051	.0000145
91				.0000001	.0000002	.0000007	.0000022	.0000066
92					.0000001	.0000003	.0000009	.0000029
93						.0000001	.0000004	.0000012
94							.0000001	.0000005
95							.0000001	.0000002
96								.0000001

x	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	1.0000000	1.0000000
8	1.0000000	1.0000000
9	1.0000000	1.0000000
10	1.0000000	1.0000000
11	1.0000000	1.0000000
12	1.0000000	1.0000000
13	1.0000000	1.0000000
14	1.0000000	1.0000000
15	1.0000000	1.0000000
16	1.0000000	1.0000000
17	1.0000000	1.0000000
18	1.0000000	1.0000000
19	1.0000000	1.0000000
20	1.0000000	1.0000000
21	1.0000000	1.0000000
22	1.0000000	1.0000000
23	1.0000000	1.0000000
24	1.0000000	1.0000000
25	1.0000000	1.0000000
26	1.0000000	1.0000000
27	1.0000000	1.0000000
28	1.0000000	1.0000000
29	1.0000000	1.0000000
30	1.0000000	1.0000000
31	1.0000000	1.0000000
32	1.0000000	1.0000000
33	1.0000000	1.0000000
34	1.0000000	1.0000000
35	1.0000000	1.0000000
36	1.0000000	1.0000000
37	.9999999	1.0000000
38	.9999998	.9999999
39	.9999995	.9999999
40	.9999989	.9999996
41	.9999973	.9999991
42	.9999939	.9999979
43	.9999843	.9999938
44	.9999704	.9999892
45	.9999581	.9999765
46	.9999477	.9999605
47	.9999341	.9999521
48	.9999183	.9999407
49	.9999072	.9999283
50	.9998954	.9999157
51	.9998826	.9999026
52	.9998689	.9998894
53	.9998547	.9998761
54	.9998403	.9998627
55	.9998257	.9998493
56	.9998116	.9998358
57	.9997979	.9998224
58	.9997841	.9998091
59	.9997701	.9997958
60	.9997561	.9997825
61	.9997422	.9997692
62	.9997283	.9997559
63	.9997144	.9997426
64	.9997005	.9997293
65	.9996866	.9997160
66	.9996727	.9997027

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

x	.49	.50
67	.5093449	.6014488
68	.4411753	.5341462
69	.3747158	.4658538
70	.3117879	.3985512
71	.2519190	.3341329
72	.2022349	.2742512
73	.1574054	.2201913
74	.1196441	.1727963
75	.0887567	.1324465
76	.0642244	.0990907
77	.0453062	.0723182
78	.0311429	.0514566
79	.0208497	.0356766
80	.0135890	.0240913
81	.0086187	.0158368
82	.0053171	.0101100
83	.0031895	.0063023
84	.0018596	.0038119
85	.0010534	.0022406
86	.0005795	.0012794
87	.0003095	.0007053
88	.0001604	.0003817
89	.0000806	.0001993
90	.0000393	.0001009
91	.0000186	.0000495
92	.0000083	.0000235
93	.0000038	.0000108
94	.0000016	.0000048
95	.0000007	.0000021
96	.0000003	.0000009
97	.0000001	.0000004
98		.0000001
99		.0000001

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$$P(a, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 137

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.7476393	.9371982	.9845927	.9962747	.9991126	.9997918	.9999519	.9999991
2	.3984130	.7616093	.9193100	.9750096	.9927137	.9979710	.9994559	.9998587
3	.1585403	.5179351	.7820146	.9147583	.9698126	.9900680	.9969171	.9990883
4	.0495073	.2941526	.5909333	.8017873	.9155732	.9673679	.9903180	.9960773
5	.0126123	.1411584	.3929573	.6440985	.8199405	.9188283	.9666355	.9872906
6	.0026991	.0381044	.1300864	.4693268	.6860548	.8364142	.9232236	.9669756
7	.0004961	.0208149	.1192670	.3091194	.5310293	.7206038	.8513374	.9281129
8	.0000797	.0065731	.0551255	.1841950	.3783348	.5824405	.7500784	.8648699
9	.0000113	.0018501	.0228895	.0996121	.2477409	.4390498	.6262265	.7755050
10	.0000014	.0004683	.0085993	.0490968	.1492227	.3078626	.4926086	.6641325
11	.0000002	.0001076	.0029422	.0221553	.0828525	.2006799	.3638756	.5401490
12		.0000326	.0009221	.0091948	.0425224	.1216922	.2520051	.4136855
13		.0000043	.0003662	.0035246	.0203346	.0687537	.1635912	.3080449
14		.0000008	.0000711	.0012522	.0089554	.0362626	.0994027	.2070787
15		.0000001	.0000176	.0004145	.0036974	.0178941	.0569437	.1358487
16			.0000041	.0001281	.0014282	.0082798	.0306144	.0816655
17			.0000037	.0000371	.0005175	.0036005	.0155033	.0470671
18			.0000002	.0000101	.0001764	.0014746	.0074078	.0256533
19			.0000006	.0000026	.0000566	.0005700	.0033456	.0132394
20			.0000000	.0000006	.0000172	.0002083	.0014304	.0064786
21				.0000001	.0000049	.0000721	.0005800	.0030100
22				.0000013	.0000037	.0000237	.0002833	.0013895
23				.0000003	.0000007	.0000074	.0000818	.0005591
24				.0000001	.0000001	.0000022	.0000285	.0002241
25					.0000006	.0000036	.0000095	.0000857
26						.0000002	.0000030	.0000313
27							.0000009	.0000109
28							.0000003	.0000037
29							.0000001	.0000018
30								.0000004
31								.0000001

x	.09	.10	.11	.12	.13	.14	.15	.16
1	.9999976	.9999995	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	.9999644	.9999913	.9999979	.9999995	.9999999	1.0000000	1.0000000	1.0000000
3	.9997414	.9999293	.9999913	.9999952	.9999988	.9999997	.9999999	1.0000000
4	.9987489	.9996196	.9998891	.9999689	.9999916	.9999978	.9999994	.9999999
5	.9954607	.9984669	.9998072	.9999485	.9999553	.9999673	.9999965	.9999991
6	.9868101	.9950598	.9982517	.9994120	.9998112	.9999419	.9999828	.9999951
7	.9679880	.9867314	.9948379	.9981025	.9993376	.9997794	.9999297	.9999878
8	.9311508	.9624137	.9869418	.9947607	.9980130	.9992844	.9997343	.9999153
9	.8771625	.9381455	.9718830	.9873556	.9947568	.9979748	.9992513	.9997368
10	.7977945	.8883483	.9429886	.9728019	.9879084	.9949190	.9974978	.9992368
11	.6973197	.8175254	.8985426	.9476188	.9747333	.9885517	.9951049	.9980171
12	.5825918	.7266718	.8351197	.9078451	.9520038	.9765843	.9882493	.9953361
13	.4614514	.6206759	.7528124	.8508964	.9163421	.9561284	.9783991	.9899741
14	.3501521	.5074345	.6549969	.7762258	.8651041	.9241099	.9599882	.9801534
15	.2509040	.3954666	.5479180	.6860393	.7972914	.8779413	.9312115	.9635857
16	.1704150	.2944469	.4393953	.5851943	.7142015	.8163139	.8895699	.9377088
17	.1097165	.2084203	.3371218	.4803385	.6195315	.7398148	.8358375	.9018448
18	.0669882	.1403862	.2471509	.3785667	.5188445	.6511775	.7631577	.8491701
19	.0388157	.0899905	.1730176	.2860468	.4185434	.5549820	.6803579	.7844664
20	.0211647	.0549199	.1156311	.2070387	.3246742	.4569086	.5886523	.7072760
21	.0118181	.0319291	.0737841	.1434550	.2419182	.3627008	.4935555	.6205287
22	.0057708	.0176967	.0449681	.0951555	.1730228	.2772619	.3998760	.5284703
23	.0026448	.0093586	.0261891	.0604378	.1187416	.2039254	.3187063	.4350134
24	.0011978	.0047262	.0143842	.0367498	.0781867	.1442329	.2357918	.3479593
25	.0005181	.0022814	.0077711	.0214429	.0494020	.0980753	.1713193	.2682912
26	.0002142	.0010536	.0039650	.0119538	.0299608	.0641119	.1198931	.1997008
27	.0000848	.0004459	.0019386	.0064070	.0174469	.0402950	.0807998	.1434815
28	.0000321	.0001974	.0009089	.0032940	.0097595	.0243555	.0524380	.0993510
29	.0000117	.0000802	.0004090	.0016243	.0052469	.0141616	.0327754	.0663730
30	.0000041	.0000313	.0001767	.0007716	.0027124	.0079243	.0197355	.0427631
31	.0000014	.0000117	.0000734	.0003520	.0013490	.0042690	.0114481	.0265735
32	.0000004	.0000042	.0000233	.0001545	.0006458	.0022151	.0064013	.0159897
33	.0000001	.0000015	.0000113	.0000653	.0002978	.0011075	.0034512	.00998139
34		.0000002	.0000042	.0000264	.0001323	.0005339	.0017948	.0051437
35		.0000002	.0000015	.0000104	.0000567	.0002482	.0009006	.0028723
36			.0000005	.0000019	.0000234	.0001113	.0004368	.0014430
37			.0000002	.0000009	.0000093	.0000482	.0002041	.0007856
38			.0000001	.0000005	.0000036	.0000202	.0000922	.0003526
39				.0000002	.0000013	.0000081	.0000403	.0001657
40				.0000001	.0000005	.0000032	.0000170	.0000753
41					.0000002	.0000012	.0000069	.0000331
42					.0000001	.0000006	.0000037	.0000141
43						.0000002	.0000010	.0000058
44						.0000001	.0000004	.0000023
45							.0000001	.0000009
46								.0000003
47								.0000001

x	.17	.18	.19	.20	.21	.22	.23	.24
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	.9999987	.9999996	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	.9999937	.9999982	.9999995	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
8	.9999744	.9999923	.9999978	.9999994	.9999998	1.0000000	1.0000000	1.0000000
9	.9999112	.9999713	.9999911	.9999974	.9999992	.9999998	.9999999	1.0000000
10	.9997249	.9999053	.9999688	.9999901	.9999970	.9999991	.9999998	.9999999
11	.9998365	.9997198	.9999017	.9999670	.9999894	.9999967	.9999990	.9999997

$$P(r, n, p) = \sum_{i=0}^n \binom{n}{i} p^i (1-p)^{n-i}$$

n = 137

r	.25	.26	.27	.28	.29	.30	.31	.32
43	.0543233	.0918739	.1447994	.2136892	.2977340	.3926346	.4931059	.5928309
44	.0365511	.0646970	.1064679	.1631712	.2369255	.3237708	.4201714	.5200319
45	.0238951	.0449975	.0761798	.1222127	.1838640	.2607189	.3501676	.4476856
46	.0151764	.0294850	.0530280	.0887768	.1390732	.2048735	.2851498	.3748180
47	.0097640	.0190762	.0359031	.0627712	.1024415	.1570060	.2267647	.3101755
48	.0056128	.0119953	.0246379	.0431901	.0735473	.1172862	.1754601	.2494549
49	.0032682	.0073305	.0151328	.0289132	.0513666	.0853685	.1331688	.1958779
50	.0018487	.0043536	.0094191	.0188270	.0349460	.0605229	.0982389	.1500834
51	.0010160	.0025128	.0056997	.0119243	.0231274	.0417823	.0706837	.1181548
52	.0005424	.0014094	.0033530	.0073450	.0148925	.0280811	.0494591	.0817070
53	.0002814	.0007683	.0019175	.0043998	.0093297	.0181699	.0337332	.0580100
54	.0001418	.0004070	.0010660	.0025629	.0056857	.0116950	.0224080	.0401854
55	.0000695	.0002046	.0005761	.0014517	.0033705	.0073451	.0144630	.0270335
56	.0000331	.0001049	.0003027	.0007996	.0019434	.0043671	.0091139	.0177541
57	.0000153	.0000510	.0001546	.0004283	.0010898	.0025610	.0055518	.0113895
58	.0000069	.0000241	.0000768	.0002230	.0005944	.0014611	.0033867	.0070458
59	.0000030	.0000111	.0000371	.0001129	.0003153	.0008109	.0019293	.0042644
60	.0000013	.0000049	.0000174	.0000556	.0001627	.0004377	.0010886	.0025121
61	.0000005	.0000021	.0000079	.0000266	.0000816	.0002299	.0006597	.0014401
62	.0000002	.0000009	.0000035	.0000124	.0000398	.0001174	.0003198	.0008034
63	.0000001	.0000004	.0000015	.0000056	.0000180	.0000563	.0001658	.0004360
64		.0000001	.0000006	.0000025	.0000087	.0000282	.0000918	.0002303
65		.0000001	.0000003	.0000011	.0000039	.0000132	.0000438	.0001103
66			.0000001	.0000004	.0000017	.0000060	.0000197	.0000591
67				.0000002	.0000007	.0000027	.0000092	.0000287
68				.0000001	.0000003	.0000012	.0000041	.0000136
69					.0000001	.0000005	.0000018	.0000062
70						.0000002	.0000008	.0000028
71						.0000001	.0000003	.0000012
72							.0000001	.0000005
73							.0000001	.0000003
74								.0000001
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$$P(n, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 137

	.33	.34	.35	.36	.37	.38	.39	.40
68	.0018794	.0041011	.0083745	.0160524	.0289555	.0493374	.0793376	.1216729
69	.0010646	.0024920	.0051513	.0102736	.0192687	.0349780	.0569788	.0862834
70	.0005669	.0013223	.0028620	.0054039	.0102480	.0192439	.0328081	.0531874
71	.0003148	.0007789	.0017986	.0038671	.0076853	.0150836	.0271151	.0461934
72	.0001643	.0004241	.0010207	.0023572	.0048485	.0096824	.0180011	.0318192
73	.0000834	.0002247	.0005637	.0013115	.0029030	.0059909	.0116444	.0213561
74	.0000418	.0001158	.0003029	.0007400	.0016221	.0036323	.0073376	.0139818
75	.0000219	.0000581	.0001584	.0004038	.0009401	.0021442	.0045031	.0089138
76	.0000119	.0000323	.0000806	.0002138	.0005301	.0012322	.0026909	.0055345
77	.0000062	.0000164	.0000439	.0001103	.0002849	.0006891	.0015634	.0033444
78	.0000032	.0000082	.0000219	.0000553	.0001409	.0003750	.0008863	.0019679
79	.0000016	.0000041	.0000109	.0000270	.0000675	.0001686	.0004188	.0010186
80	.0000008	.0000021	.0000054	.0000138	.0000341	.0000853	.0002118	.0005138
81	.0000004	.0000011	.0000028	.0000070	.0000178	.0000441	.0001103	.0002714
82	.0000002	.0000005	.0000013	.0000033	.0000082	.0000205	.0000512	.0001263
83	.0000001	.0000003	.0000008	.0000020	.0000050	.0000125	.0000312	.0000763
84	.0000001	.0000001	.0000003	.0000008	.0000020	.0000050	.0000125	.0000312
85	.0000001	.0000001	.0000001	.0000003	.0000008	.0000020	.0000050	.0000125
86	.0000001	.0000001	.0000001	.0000001	.0000003	.0000008	.0000020	.0000050

	.41	.42	.43	.44	.45	.46	.47	.48
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
14	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
15	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
16	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
17	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
18	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
19	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
20	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
21	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
22	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
23	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
24	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
25	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
26	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
27	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
28	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
29	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
30	.99999993	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
31	.99999988	.99999994	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
32	.99999984	.99999991	.99999995	.99999998	1.00000000	1.00000000	1.00000000	1.00000000
33	.99999979	.99999986	.99999991	.99999995	.99999998	1.00000000	1.00000000	1.00000000
34	.99999975	.99999981	.99999985	.99999989	.99999992	.99999995	1.00000000	1.00000000
35	.99999970	.99999977	.99999982	.99999986	.99999989	.99999992	.99999995	1.00000000
36	.99999963	.99999968	.99999973	.99999977	.99999980	.99999983	.99999986	.99999989
37	.99999957	.99999961	.99999965	.99999968	.99999971	.99999974	.99999977	.99999980
38	.99999950	.99999954	.99999957	.99999960	.99999963	.99999966	.99999969	.99999972
39	.99999943	.99999946	.99999949	.99999952	.99999955	.99999958	.99999961	.99999964
40	.99999936	.99999939	.99999942	.99999945	.99999948	.99999951	.99999954	.99999957
41	.99999929	.99999932	.99999935	.99999938	.99999941	.99999944	.99999947	.99999950
42	.99999922	.99999925	.99999928	.99999931	.99999934	.99999937	.99999940	.99999943
43	.99999915	.99999918	.99999921	.99999924	.99999927	.99999930	.99999933	.99999936
44	.99999908	.99999911	.99999914	.99999917	.99999920	.99999923	.99999926	.99999929
45	.99999901	.99999904	.99999907	.99999910	.99999913	.99999916	.99999919	.99999922
46	.99999894	.99999897	.99999899	.99999902	.99999905	.99999908	.99999911	.99999914
47	.99999887	.99999890	.99999893	.99999896	.99999899	.99999902	.99999905	.99999908
48	.99999880	.99999883	.99999886	.99999889	.99999892	.99999895	.99999898	.99999901
49	.99999873	.99999876	.99999879	.99999882	.99999885	.99999888	.99999891	.99999894
50	.99999866	.99999869	.99999872	.99999875	.99999878	.99999881	.99999884	.99999887
51	.99999859	.99999862	.99999865	.99999868	.99999871	.99999874	.99999877	.99999880
52	.99999852	.99999855	.99999858	.99999861	.99999864	.99999867	.99999870	.99999873
53	.99999845	.99999848	.99999851	.99999854	.99999857	.99999860	.99999863	.99999866
54	.99999838	.99999841	.99999844	.99999847	.99999850	.99999853	.99999856	.99999859
55	.99999831	.99999834	.99999837	.99999840	.99999843	.99999846	.99999849	.99999852
56	.99999824	.99999827	.99999830	.99999833	.99999836	.99999839	.99999842	.99999845
57	.99999817	.99999820	.99999823	.99999826	.99999829	.99999832	.99999835	.99999838
58	.99999810	.99999813	.99999816	.99999819	.99999822	.99999825	.99999828	.99999831
59	.99999803	.99999806	.99999809	.99999812	.99999815	.99999818	.99999821	.99999824
60	.99999796	.99999799	.99999802	.99999805	.99999808	.99999811	.99999814	.99999817
61	.99999789	.99999792	.99999795	.99999798	.99999801	.99999804	.99999807	.99999810
62	.99999782	.99999785	.99999788	.99999791	.99999794	.99999797	.99999800	.99999803
63	.99999775	.99999778	.99999781	.99999784	.99999787	.99999790	.99999793	.99999796
64	.99999768	.99999771	.99999774	.99999777	.99999780	.99999783	.99999786	.99999789
65	.99999761	.99999764	.99999767	.99999770	.99999773	.99999776	.99999779	.99999782
66	.99999754	.99999757	.99999760	.99999763	.99999766	.99999769	.99999772	.99999775
67	.99999747	.99999750	.99999753	.99999756	.99999759	.99999762	.99999765	.99999768
68	.99999740	.99999743	.99999746	.99999749	.99999752	.99999755	.99999758	.99999761
69	.99999733	.99999736	.99999739	.99999742	.99999745	.99999748	.99999751	.99999754
70	.99999726	.99999729	.99999732	.99999735	.99999738	.99999741	.99999744	.99999747
71	.99999719	.99999722	.99999725	.99999728	.99999731	.99999734	.99999737	.99999740
72	.99999712	.99999715	.99999718	.99999721	.99999724	.99999727	.99999730	.99999733
73	.99999705	.99999708	.99999711	.99999714	.99999717	.99999720	.99999723	.99999726
74	.99999698	.99999701	.99999704	.99999707	.99999710	.99999713	.99999716	.99999719
75	.99999691	.99999694	.99999697	.99999700	.99999703	.99999706	.99999709	.99999712
76	.99999684	.99999687	.99999690	.99999693	.99999696	.99999699	.99999702	.99999705
77	.99999677	.99999680	.99999683	.99999686	.99999689	.99999692	.99999695	.99999698
78	.99999670	.99999673	.99999676	.99999679	.99999682	.99999685	.99999688	.99999691
79	.99999663	.99999666	.99999669	.99999672	.99999675	.99999678	.99999681	.99999684
80	.99999656	.99999659	.99999662	.99999665	.99999668	.99999671	.99999674	.99999677
81	.99999649	.99999652	.99999655	.99999658	.99999661	.99999664	.99999667	.99999670
82	.99999642	.99999645	.99999648	.99999651	.99999654	.99999657	.99999660	.99999663

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$$P(n, n, 1) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n x 157

λ_p	.41	.42	.43	.44	.45	.46	.47	.48
69	.0251834	.0489726	.0496094	.1072590	.1578300	.2810310	.8960900	.3635873
69	.0126641	.0894890	.0494933	.0764399	.1198840	.1737131	.2406543	.3124583
70	.0107437	.0197950	.0343180	.0566898	.0890789	.1334053	.1907846	.2610814
71	.0067471	.0128856	.0231971	.0397061	.0645934	.1000500	.1478245	.2087401
72	.0041363	.0081631	.0152805	.0271139	.0456864	.0732371	.1118739	.1631470
73	.002569	.0050475	.0090056	.0180445	.0315096	.0528998	.0826500	.1245682
74	.0014838	.0030387	.0061288	.0116995	.0211902	.0364189	.0595744	.0928597
75	.0008030	.0017406	.0037389	.0073879	.0138709	.0247189	.0418765	.0675485
76	.0004406	.0010134	.0022085	.0045432	.0088474	.0163469	.0286933	.0479174
77	.0002351	.0005633	.0012729	.0027182	.0054944	.0105289	.0191560	.0331366
78	.0001280	.0003039	.0007187	.0015820	.0033211	.0066826	.0124559	.0223779
79	.0000610	.0001595	.0003893	.0008668	.0018432	.0040399	.0078854	.0146331
80	.0000302	.0000813	.0002063	.0004939	.0011174	.0023931	.0048584	.0093688
81	.0000144	.0000403	.0001064	.0002645	.0006217	.0013823	.0029123	.0058214
82	.0000067	.0000194	.0000533	.0001377	.0003362	.0007763	.0016978	.0035213
83	.0000030	.0000091	.0000259	.0000639	.0001767	.0004238	.0009623	.0020714
84	.0000013	.0000041	.0000123	.0000342	.0000902	.0002248	.0005301	.0011848
85	.0000006	.0000018	.0000056	.0000163	.0000445	.0001159	.0002837	.0006582
86	.0000002	.0000008	.0000025	.0000074	.0000214	.0000580	.0001475	.0003583
87	.0000001	.0000003	.0000011	.0000034	.0000101	.0000282	.0000744	.0001863
88		.0000001	.0000005	.0000015	.0000046	.0000133	.0000365	.0000948
89		.0000001	.0000003	.0000010	.0000030	.0000081	.0000217	.0000540
90			.0000001	.0000003	.0000009	.0000027	.0000080	.0000224
91				.0000001	.0000004	.0000012	.0000036	.0000104
92					.0000001	.0000005	.0000015	.0000047
93						.0000001	.0000006	.0000020
94							.0000001	.0000009
95							.0000001	.0000004
96								.0000001
97								.0000001

λ_p	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	1.0000000	1.0000000
8	1.0000000	1.0000000
9	1.0000000	1.0000000
10	1.0000000	1.0000000
11	1.0000000	1.0000000
12	1.0000000	1.0000000
13	1.0000000	1.0000000
14	1.0000000	1.0000000
15	1.0000000	1.0000000
16	1.0000000	1.0000000
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18	1.0000000	1.0000000
19	1.0000000	1.0000000
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21	1.0000000	1.0000000
22	1.0000000	1.0000000
23	1.0000000	1.0000000
24	1.0000000	1.0000000
25	1.0000000	1.0000000
26	1.0000000	1.0000000
27	1.0000000	1.0000000
28	1.0000000	1.0000000
29	1.0000000	1.0000000
30	1.0000000	1.0000000
31	1.0000000	1.0000000
32	1.0000000	1.0000000
33	1.0000000	1.0000000
34	1.0000000	1.0000000
35	1.0000000	1.0000000
36	1.0000000	1.0000000
37	1.0000000	1.0000000
38	.9999999	1.0000000
39	.9999997	.9999999
40	.9999992	.9999998
41	.9999981	.9999994
42	.9999956	.9999985
43	.9999900	.9999965
44	.9999782	.9999922
45	.9999539	.9999828
46	.9999057	.9999635
47	.9998133	.9999248
48	.9996410	.9998499
49	.9993308	.9997095
50	.9987894	.9994545
51	.9978741	.9990057
52	.9963738	.9982400
53	.9939898	.9969737
54	.9903164	.9949429
55	.9848264	.9917839
56	.9768662	.9870146
57	.9656674	.9800359
58	.9503774	.9701160
59	.9301148	.9564334
60	.9040475	.9381126
61	.8714889	.9143955
62	.8320081	.8843314
63	.7854970	.8473786

$$P(x, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

	.49	.50
64	.7383050	.8035062
65	.6732116	.7527768
66	.6094519	.6938079
67	.5426215	.6363800
68	.4745784	.5817975
69	.4072809	.5300000
70	.3436216	.4812025
71	.2838746	.4363480
72	.2275601	.3941981
73	.1753719	.3547281
74	.1261472	.3174493
75	.0808915	.2826214
76	.0492453	.2506066
77	.0245709	.0217045
78	.0090839	.0068874
79	.0025933	.0017566
80	.0007146	.0004400
81	.0001054	.0000641
82	.0000034	.0000034
83	.0000000	.0000000
84	.0000000	.0000000
85	.0000000	.0000000
86	.0000000	.0000000
87	.0000000	.0000000
88	.0000000	.0000000
89	.0000000	.0000000
90	.0000000	.0000000
91	.0000000	.0000000
92	.0000000	.0000000
93	.0000000	.0000000
94	.0000000	.0000000
95	.0000000	.0000000
96	.0000000	.0000000
97	.0000000	.0000000
98	.0000000	.0000000
99	.0000000	.0000000

$$H(n, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 130

	.01	.02	.03	.04	.05	.06	.07	.08
1	.7801689	.9304848	.9850549	.9944837	.9991549	.9998043	.9999513	.9999999
2	.4019033	.7451911	.9252488	.9786602	.9930337	.9980808	.9994902	.9999698
3	.1609390	.5888008	.7881334	.9171684	.9709377	.9904488	.9971048	.9994497
4	.0503976	.2766888	.5746807	.8063061	.9718852	.9967229	.9997800	.9999315
5	.0139812	.1242183	.3988966	.6504061	.8847808	.9817406	.9961513	.9997938
6	.0037982	.0397655	.2349795	.4743177	.6927491	.8413590	.9286635	.9686010
7	.0005139	.0213407	.0825935	.3135277	.5878705	.7874277	.9036289	.9512800
8	.0000639	.0028560	.0570493	.1891927	.3859625	.5907381	.7371645	.8499254
9	.0000180	.0019445	.0218566	.1029954	.2542706	.4476533	.6348962	.7843548
10	.0000015	.0004961	.0090880	.0311174	.1541486	.3157339	.5019619	.6730331
11	.0000008	.0001148	.0021119	.0082330	.0244721	.0671109	.1388849	.2500660
12		.0000243	.0003967	.0019107	.0045359	.0104517	.0239730	.0436407
13		.0000047	.0000885	.0017314	.0031340	.0071930	.0147809	.0261135
14		.0000008	.0000169	.0003454	.0009514	.0020812	.0044089	.0074681
15		.0000001	.0000019	.0000446	.0001603	.0003862	.0008498	.0015701
16			.0000043	.0000139	.0003416	.0008564	.0020574	.0043400
17			.0000002	.0000011	.0000363	.0001628	.0003944	.0008350
18				.0000002	.0000006	.0000243	.0000649	.0001483
19				.0000000	.0000000	.0000019	.0000064	.0000195
20					.0000000	.0000000	.0000007	.0000025
21				.0000000	.0000000	.0000000	.0000000	.0000000
22					.0000000	.0000000	.0000000	.0000000
23					.0000000	.0000000	.0000000	.0000000
24					.0000000	.0000000	.0000000	.0000000
25					.0000000	.0000000	.0000000	.0000000
26						.0000000	.0000000	.0000000
27						.0000000	.0000000	.0000000
28						.0000000	.0000000	.0000000
29						.0000000	.0000000	.0000000
30						.0000000	.0000000	.0000000
31						.0000000	.0000000	.0000000
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34						.0000000	.0000000	.0000000
35						.0000000	.0000000	.0000000
36						.0000000	.0000000	.0000000
37						.0000000	.0000000	.0000000
38						.0000000	.0000000	.0000000
39						.0000000	.0000000	.0000000
40						.0000000	.0000000	.0000000
41						.0000000	.0000000	.0000000
42						.0000000	.0000000	.0000000
43						.0000000	.0000000	.0000000
44						.0000000	.0000000	.0000000
45						.0000000	.0000000	.0000000
46						.0000000	.0000000	.0000000
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48						.0000000	.0000000	.0000000
49						.0000000	.0000000	.0000000
50						.0000000	.0000000	.0000000
51						.0000000	.0000000	.0000000
52						.0000000	.0000000	.0000000
53						.0000000	.0000000	.0000000
54						.0000000	.0000000	.0000000
55						.0000000	.0000000	.0000000
56						.0000000	.0000000	.0000000
57						.0000000	.0000000	.0000000
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63						.0000000	.0000000	.0000000
64						.0000000	.0000000	.0000000
65						.0000000	.0000000	.0000000
66						.0000000	.0000000	.0000000
67						.0000000	.0000000	.0000000
68						.0000000	.0000000	.0000000
69						.0000000	.0000000	.0000000
70						.0000000	.0000000	.0000000
71						.0000000	.0000000	.0000000
72						.0000000	.0000000	.0000000
73						.0000000	.0000000	.0000000
74						.0000000	.0000000	.0000000
75						.0000000	.0000000	.0000000
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77						.0000000	.0000000	.0000000
78						.0000000	.0000000	.0000000
79						.0000000	.0000000	.0000000
80						.0000000	.0000000	.0000000
81						.0000000	.0000000	.0000000
82						.0000000	.0000000	.0000000
83						.0000000	.0000000	.0000000
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85						.0000000	.0000000	.0000000
86						.0000000	.0000000	.0000000
87						.0000000	.0000000	.0000000
88						.0000000	.0000000	.0000000
89						.0000000	.0000000	.0000000
90						.0000000	.0000000	.0000000
91						.0000000	.0000000	.0000000
92						.0000000	.0000000	.0000000
93						.0000000	.0000000	.0000000
94						.0000000	.0000000	.0000000
95						.0000000	.0000000	.0000000
96						.0000000	.0000000	.0000000
97						.0000000	.0000000	.0000000
98						.0000000	.0000000	.0000000
99						.0000000	.0000000	.0000000
100						.0000000	.0000000	.0000000
101						.0000000	.0000000	.0000000
102						.0000000	.0000000	.0000000
103						.0000000	.0000000	.0000000
104						.0000000	.0000000	.0000000
105						.0000000	.0000000	.0000000
106						.0000000	.0000000	.0000000
107						.0000000	.0000000	.0000000
108						.0000000	.0000000	.0000000
109						.0000000	.0000000	.0000000
110						.0000000	.0000000	.0000000
111						.0000000	.0000000	.0000000
112						.0000000	.0000000	.0000000
113						.0000000	.0000000	.0000000
114						.0000000	.0000000	.0000000
115						.0000000	.0000000	.0000000
116						.0000000	.0000000	.0000000
117						.0000000	.0000000	.0000000
118						.0000000	.0000000	.0000000
119						.0000000	.0000000	.0000000
120						.0000000	.0000000	.0000000
121						.0000000	.0000000	.0000000
122						.0000000	.0000000	.0000000
123						.0000000	.0000000	.0000000
124						.0000000	.0000000	.0000000
125						.0000000	.0000000	.0000000
126						.0000000	.0000000	.0000000
127						.0000000	.0000000	.0000000
128						.0000000	.0000000	.0000000
129						.0000000	.0000000	.0000000
130						.0000000	.0000000	.0000000
131						.0000000	.0000000	.0000000
132						.0000000	.0000000	.0000000
133						.0000000	.0000000	.0000000
134						.0000000	.0000000	.0000000
135						.0000000	.0000000	.0000000
136						.0000000	.0000000	.0000000
137						.0000000	.0000000	.0000000
138						.0000000	.0000000	.0000000
139						.0000000	.0000000	.0000000
140						.0000000	.0000000	.0000000
141						.0000000	.0000000	.0000000
142						.0000000	.0000000	.0000000
143						.0000000	.0000000	.0000000
144						.0000000	.0000000	.0000000
145						.0000000	.0000000	.0000000
146						.0000000	.0000000	.0000000
147						.0000000	.0000000	.0000000
148						.0000000	.0000000	.0000000
149						.0000000	.0000000	.0000000
150						.0000000	.0000000	.0000000

n = 138

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 138

λ	.25	.26	.27	.28	.29	.30	.31	.32
43	.0863751	.1382198	.2066906	.2905309	.3860217	.4876389	.5887648	.6837290
44	.0901367	.1409669	.2107465	.2952082	.3917259	.4944538	.5958845	.6868419
45	.0940948	.1457650	.2168174	.2998397	.3974500	.5004893	.5998811	.6898359
46	.0977059	.1496014	.2213576	.3038613	.4019519	.5054343	.6028689	.6928366
47	.1011356	.1533362	.2252790	.3071389	.4052685	.5104271	.6053187	.6947644
48	.1043817	.1569782	.2285261	.3100328	.4080945	.5143038	.6087401	.6964511
49	.1074506	.1605363	.2310499	.3124728	.4104388	.5177038	.6117096	.6978855
50	.1103403	.1639134	.2337429	.3144793	.4123100	.5206319	.6142406	.6990826
51	.1130536	.1671174	.2365168	.3160509	.4137138	.5231766	.6164653	.6999377
52	.1155912	.1701514	.2393639	.3172971	.4146548	.5253405	.6183844	.7004820
53	.1179541	.1730154	.2422863	.3182122	.4152386	.5271195	.6199982	.7007503
54	.1201434	.1757094	.2452841	.3188009	.4154689	.5285183	.6213168	.7007856
55	.1221601	.1782334	.2483574	.3190678	.4153437	.5295419	.6223497	.7006177
56	.1240042	.1805874	.2515051	.3189166	.4148682	.5302943	.6230971	.7002829
57	.1256757	.1827714	.2547274	.3183452	.4140479	.5307717	.6235689	.7000000
58	.1271736	.1847854	.2580241	.3173587	.4128882	.5309781	.6237741	.6997829
59	.1285069	.1866294	.2613951	.3159609	.4113947	.5309183	.6237241	.6995377
60	.1296846	.1883034	.2648394	.3141678	.4095722	.5305983	.6234289	.6991729
61	.1307167	.1898074	.2683561	.3119949	.4074967	.5300243	.6228877	.6986986
62	.1316034	.1911414	.2719354	.3094572	.4051942	.5292023	.6221001	.6981251
63	.1323457	.1923054	.2755761	.3064697	.4026817	.5281393	.6210669	.6974626
64	.1329436	.1932994	.2792784	.3030472	.4000000	.5268513	.6200000	.6967201
65	.1333971	.1941234	.2829411	.2992047	.3971667	.5253433	.6189091	.6959076
66	.1337064	.1947774	.2865641	.2949572	.3941942	.5236213	.6177941	.6950251
67	.1338717	.1952614	.2901474	.2902197	.3910867	.5216903	.6166541	.6940726
68	.1338940	.1955854	.2936901	.2850000	.3878482	.5195563	.6154941	.6930601
69	.1337743	.1957594	.2971924	.2793125	.3844842	.5172253	.6143141	.6919876
70	.1335126	.1957834	.3006551	.2731600	.3810000	.5147043	.6131141	.6908651
71	.1331089	.1956574	.3040774	.2665475	.3774000	.5119983	.6118941	.6896926
72	.1325632	.1953814	.3074591	.2594800	.3735842	.5091143	.6106541	.6884701
73	.1318767	.1949554	.3107914	.2519575	.3695582	.5060583	.6093941	.6872076
74	.1310504	.1943794	.3140741	.2439800	.3653267	.5028263	.6081141	.6859051

λ	.33	.34	.35	.36	.37	.38	.39	.40
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
14	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
15	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
16	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
17	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
18	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
19	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
20	.9999998	.9999998	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
21	.9999994	.9999994	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
22	.9999982	.9999982	.9999995	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
23	.9999951	.9999951	.9999984	.9999995	1.0000000	1.0000000	1.0000000	1.0000000
24	.9999874	.9999874	.9999957	.9999982	.9999995	1.0000000	1.0000000	1.0000000
25	.9999693	.9999693	.9999962	.9999986	.9999996	.9999999	1.0000000	1.0000000
26	.9999283	.9999283	.9999904	.9999967	.9999989	.9999997	.9999999	1.0000000
27	.9998413	.9998413	.9999769	.9999918	.9999972	.9999991	.9999997	.9999999
28	.9997217	.9997217	.9999429	.9999830	.9999936	.9999986	.9999995	.9999998
29	.9995751	.9995751	.9998823	.9999545	.9999832	.9999941	.9999986	.9999994
30	.9994051	.9994051	.9997506	.9998995	.9999613	.9999858	.9999950	.9999983
31	.9992017	.9992017	.9996431	.9997871	.9999146	.9999673	.9999881	.9999958
32	.9989555	.9989555	.9995099	.9996668	.9998191	.9999279	.9999736	.9999901
33	.9986717	.9986717	.9993326	.9995156	.9996316	.9998472	.9999395	.9999778
34	.9983466	.9983466	.9991124	.9993404	.9994770	.9997687	.9998716	.9999495
35	.9979751	.9979751	.9988630	.9991331	.9992703	.9996384	.9997375	.9998827
36	.9975526	.9975526	.9985884	.9988937	.9991165	.9995394	.9996427	.9997801
37	.9970809	.9970809	.9982821	.9985933	.9988350	.9992785	.9995166	.9996538
38	.9965641	.9965641	.9979468	.9982666	.9985188	.9990250	.9992151	.9994704
39	.9960054	.9960054	.9975720	.9979014	.9981701	.9987810	.9990291	.9993470
40	.9954012	.9954012	.9971633	.9974966	.9977628	.9984538	.9987106	.9990749
41	.9947569	.9947569	.9967204	.9970572	.9973261	.9980489	.9983093	.9986307
42	.9940709	.9940709	.9962471	.9965874	.9968525	.9975712	.9978253	.9981474
43	.9933432	.9933432	.9957353	.9960756	.9963367	.9970503	.9973003	.9976181
44	.9925745	.9925745	.9951824	.9955227	.9957868	.9964944	.9967383	.9970506
45	.9917648	.9917648	.9945891	.9949294	.9951965	.9959000	.9961389	.9964458
46	.9909131	.9909131	.9939544	.9942947	.9945638	.9952631	.9954971	.9957986
47	.9900293	.9900293	.9932797	.9936199	.9938890	.9945840	.9948133	.9951080
48	.9891135	.9891135	.9925650	.9929052	.9931743	.9938653	.9940896	.9943781
49	.9881657	.9881657	.9918103	.9921505	.9924196	.9931066	.9933269	.9936134
50	.9871859	.9871859	.9910156	.9913558	.9916249	.9923079	.9925242	.9928057
51	.9861742	.9861742	.9901809	.9905211	.9907902	.9914682	.9916805	.9919590
52	.9851305	.9851305	.9893062	.9896464	.9899155	.9905885	.9907958	.9910693
53	.9840548	.9840548	.9883915	.9887317	.9889908	.9896578	.9898591	.9901276
54	.9829481	.9829481	.9874368	.9877770	.9880361	.9886971	.9888924	.9891559
55	.9818104	.9818104	.9863255	.9866657	.9869248	.9875818	.9877721	.9880316
56	.9806427	.9806427	.9851808	.9855210	.9857801	.9864331	.9866184	.9868739
57	.9794450	.9794450	.9839839	.9843241	.9845832	.9852322	.9854115	.9856630
58	.9782173	.9782173	.9827462	.9830864	.9833455	.9839885	.9841638	.9844123
59	.9769596	.9769596	.9814785	.9818187	.9820778	.9827168	.9828881	.9831316
60	.9756719	.9756719	.9801808	.9805210	.9807801	.9814131	.9815794	.9818189

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 138

	.33	.34	.35	.36	.37	.38	.39	.40
61	.0039453	.0081503	.0157726	.0286824	.0491579	.0796842	.1228329	.1733289
62	.0023248	.0050551	.0090837	.0156695	.0263491	.0427535	.0667239	.0970539
63	.0013335	.0029929	.0062794	.0123540	.0228853	.0398766	.0637765	.0940483
64	.0007445	.0017424	.0038062	.0077970	.0149975	.0271749	.0465046	.0735310
65	.0004046	.0009875	.0022465	.0047932	.0095886	.0180519	.0320684	.0530718
66	.0002139	.0005447	.0012930	.0028695	.0059721	.0116862	.0215855	.0375488
67	.0001101	.0002925	.0007235	.0016728	.0036288	.0073709	.0141935	.0255473
68	.0000551	.0001528	.0003942	.0009493	.0021401	.0045286	.0090178	.0169358
69	.0000268	.0000777	.0002050	.0005244	.0012309	.0027097	.0056086	.0109404
70	.0000127	.0000384	.0001078	.0002820	.0006892	.0015787	.0033977	.0068860
71	.0000059	.0000185	.0000541	.0001475	.0003756	.0008935	.0020043	.0042216
72	.0000026	.0000087	.0000264	.0000751	.0001992	.0004944	.0011311	.0023585
73	.0000011	.0000039	.0000126	.0000372	.0001028	.0002636	.0006436	.0014651
74	.0000005	.0000017	.0000058	.0000179	.0000516	.0001389	.0003501	.0008890
75	.0000002	.0000008	.0000026	.0000084	.0000252	.0000706	.0001884	.0004868
76	.0000001	.0000003	.0000011	.0000038	.0000120	.0000350	.0000955	.0002446
77		.0000001	.0000005	.0000017	.0000055	.0000168	.0000478	.0001275
78		.0000001	.0000002	.0000007	.0000025	.0000079	.0000233	.0000646
79			.0000001	.0000003	.0000011	.0000036	.0000110	.0000319
80				.0000001	.0000005	.0000016	.0000051	.0000153
81					.0000003	.0000010	.0000033	.0000093
82					.0000001	.0000003	.0000010	.0000033
83						.0000001	.0000004	.0000014
84							.0000008	.0000026
85							.0000001	.0000003
86								.0000001

	.41	.42	.43	.44	.45	.46	.47	.48
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
14	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
15	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
16	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
17	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
18	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
19	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
20	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
21	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
22	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
23	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
24	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
25	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
26	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
27	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
28	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
29	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
30	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
31	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
32	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
33	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000
34	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000
35	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000
36	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000
37	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
38	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
39	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
40	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
41	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
42	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
43	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
44	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
45	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
46	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
47	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
48	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
49	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
50	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
51	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
52	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
53	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
54	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
55	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
56	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
57	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
58	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
59	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
60	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
61	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
62	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
63	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
64	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
65	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
66	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999

$$F(n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 130

	.41	.42	.43	.44	.45	.46	.47	.48
67	.0437238	.0709510	.1094463	.1607742	.2254472	.3024978	.3893031	.4818898
68	.0300665	.0505697	.0807479	.1226646	.1776564	.2488526	.3388434	.4445081
69	.0201571	.0351521	.0581432	.0891403	.1282908	.1754793	.2308881	.2990951
70	.0131711	.0238259	.0408434	.0664795	.1029421	.1519409	.2148978	.2890994
71	.0083857	.0157413	.0279791	.0471787	.0756119	.1153938	.1680139	.2338639
72	.0052009	.0101343	.0186845	.0326544	.0541954	.0855710	.1287707	.1888917
73	.0031413	.0063561	.0121597	.0220351	.0378901	.0619310	.0963858	.1438861
74	.0018474	.0038824	.0077095	.0144913	.0258284	.0437241	.0704199	.1089998
75	.0010575	.0023090	.0047606	.0092850	.0171601	.0301009	.0501946	.0794963
76	.0005892	.0013368	.0028623	.0057943	.0111079	.0201980	.0348894	.0573389
77	.0003194	.0007531	.0016752	.0035207	.0070032	.0132052	.0236385	.0408314
78	.0001584	.0004129	.0009541	.0020824	.0042991	.0084087	.0156049	.0275181
79	.0000864	.0002201	.0005287	.0011985	.0025688	.0052134	.0100313	.0183370
80	.0000431	.0001142	.0002850	.0006711	.0014936	.0031461	.0062812	.0119019
81	.0000209	.0000576	.0001493	.0003655	.0008448	.0018473	.0038369	.0075210
82	.0000098	.0000282	.0000761	.0001939	.0004647	.0010351	.0021686	.0046284
83	.0000045	.0000134	.0000377	.0000996	.0002485	.0005860	.0013080	.0027674
84	.0000020	.0000062	.0000181	.0000498	.0001292	.0003164	.0007333	.0015108
85	.0000009	.0000028	.0000085	.0000242	.0000652	.0001660	.0003994	.0009109
86	.0000004	.0000012	.0000038	.0000114	.0000320	.0000846	.0002115	.0005087
87	.0000001	.0000005	.0000017	.0000052	.0000152	.0000419	.0001088	.0002674
88	.0000001	.0000002	.0000007	.0000023	.0000070	.0000201	.0000543	.0001393
89	.0000001	.0000001	.0000003	.0000010	.0000032	.0000094	.0000265	.0000698
90		.0000001	.0000001	.0000004	.0000014	.0000042	.0000124	.0000341
91				.0000002	.0000006	.0000019	.0000056	.0000168
92				.0000001	.0000002	.0000008	.0000025	.0000074
93					.0000001	.0000004	.0000011	.0000033
94						.0000001	.0000004	.0000014
95						.0000001	.0000002	.0000006
96							.0000001	.0000002
97								.0000001

	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
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33	1.00000000	1.00000000
34	1.00000000	1.00000000
35	1.00000000	1.00000000
36	1.00000000	1.00000000
37	1.00000000	1.00000000
38	.99999999	1.00000000
39	.99999998	.99999999
40	.99999994	.99999998
41	.99999984	.99999996
42	.99999968	.99999990
43	.99999927	.99999975
44	.99999840	.99999944
45	.99999658	.99999875
46	.99999293	.99999731
47	.99998855	.99999441
48	.99997254	.9999873
49	.99994828	.99997797
50	.99990547	.99995880
51	.99983226	.99993301
52	.99971089	.99986888
53	.99951580	.99976863
54	.99921164	.99959583
55	.99873165	.99933614
56	.99807667	.99894082
57	.99711548	.99835282
58	.99578695	.99750760
59	.99400435	.99632747
60	.99168205	.99473730
61	.98744226	.99268841
62	.9813506	.98998853

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 130

x	.49	.50
63	.8062845	.8658050
64	.7583691	.8254484
65	.7021684	.7781485
66	.6406951	.7242934
67	.5753684	.6647329
68	.5079195	.6007277
69	.4402567	.5338988
70	.3743052	.4661013
71	.3118452	.3992783
72	.2543703	.3352671
73	.2029841	.2757866
74	.1583473	.2218875
75	.1206768	.1745576
76	.0897919	.1341950
77	.0651940	.1007365
78	.0461646	.0737959
79	.0318662	.0527270
80	.0214326	.0367253
81	.0140395	.0249240
82	.0089533	.0164738
83	.0055564	.0105998
84	.0033544	.0066366
85	.0019692	.0040417
86	.0011237	.0023931
87	.0006220	.0013772
88	.0003355	.0007699
89	.0001754	.0004180
90	.0000890	.0002203
91	.0000438	.0001127
92	.0000209	.0000559
93	.0000097	.0000269
94	.0000043	.0000125
95	.0000019	.0000056
96	.0000008	.0000025
97	.0000003	.0000010
98	.0000001	.0000004
99		.0000002
100		.0000001

AMCP 706-109

$$P(n, n, p) = \sum_{i=0}^n \binom{n}{i} p^i (1-p)^{n-i}$$

n = 139

p	.01	.02	.03	.04	.05	.06	.07	.08
1	.7526613	.9396851	.9855032	.9965668	.9991991	.9998160	.9999584	.9999907
2	.4053878	.7685878	.9231821	.9766827	.9933398	.9981837	.9995231	.9999708
3	.1633487	.5275548	.7901875	.9195161	.9720615	.9909945	.9972685	.9992078
4	.0517010	.3031118	.6034498	.8107406	.9280918	.9700386	.9894928	.9955413
5	.0133574	.1473065	.4048297	.6566421	.8294003	.9245600	.9696069	.9866589
6	.0039000	.0614546	.2398902	.4872812	.6993477	.8461819	.9291948	.9701524
7	.0005410	.0223248	.1259630	.3219593	.5464789	.7344515	.8612630	.9348122
8	.0000882	.0071520	.0590160	.1942461	.3936101	.5989486	.7641107	.8748388
9	.0000127	.0020428	.0248524	.1064433	.2608555	.4562388	.6434551	.7896362
10	.0000017	.0003251	.0094729	.0531925	.1591547	.3366490	.5112673	.6818028
11	.0000002	.0001225	.0032894	.0243453	.0893699	.2136282	.3819222	.5399042
12		.0000261	.0010466	.0102540	.0466203	.1312723	.2677496	.4355965
13		.0000051	.0003067	.0039899	.0225085	.0752001	.1760841	.3302967
14		.0000002	.0000832	.0014461	.0101108	.0402353	.1086808	.2233496
15		.0000000	.0000210	.0004879	.0042383	.0201491	.0630287	.1456954
16			.0000049	.0001519	.0016636	.0094630	.0343805	.0901489
17			.0000011	.0000447	.00006120	.0041798	.0177738	.0527154
18			.0000002	.0000123	.00002119	.0017389	.0055755	.0212639
19				.0000032	.00000692	.00006829	.0029340	.0122833
20				.0000008	.00000213	.00002537	.0017091	.0075965
21				.0000002	.0000062	.00000893	.0007043	.0035860
22					.0000017	.00000398	.0002757	.0016099
23					.0000005	.00000093	.0001027	.0006882
24					.0000001	.00000029	.0000364	.0002805
25						.0000008	.0000123	.0001091
26						.0000002	.0000040	.0000406
27						.0000001	.0000012	.0000144
28							.0000004	.0000049
29							.0000001	.0000016
30								.0000005
31								.0000002
p	.09	.10	.11	.12	.13	.14	.15	.16
1	.9999980	.9999996	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	.9999701	.9999928	.9999983	.9999996	.9999999	1.0000000	1.0000000	1.0000000
3	.9997800	.9999412	.9999848	.9999962	.9999991	.9999998	.9999999	1.0000000
4	.9989213	.9996791	.9999085	.9999749	.9999933	.9999983	.9999996	.9999999
5	.9960340	.9986690	.9995877	.9998761	.9999643	.9999901	.9999973	.9999993
6	.9883238	.9957187	.9985174	.9995122	.9998469	.9999540	.9999867	.9999963
7	.9712936	.9883479	.9955628	.9964042	.9974551	.9982906	.9989448	.9993835
8	.9398918	.9787874	.9886247	.9955335	.9981430	.9994165	.9998042	.9999572
9	.8870691	.9442597	.9744756	.9890743	.9956010	.9983255	.9993948	.9997916
10	.8118913	.8981225	.9490213	.9762338	.9896373	.9957404	.9983433	.9993881
11	.7152342	.8314797	.9081229	.9535266	.9780325	.9902696	.9959311	.9983888
12	.6031274	.7446422	.8488431	.9171819	.9577520	.9798254	.9909389	.9961566
13	.4848609	.6417237	.7706915	.8643167	.9253956	.9616897	.9815418	.9916213
14	.3705933	.5300087	.6763287	.7938915	.8781627	.9320477	.9631414	.9818220
15	.2688825	.4182937	.5713633	.7074606	.8146426	.8905909	.9396113	.9667147
16	.1850549	.3148539	.4632528	.6092436	.7355467	.8332658	.9077729	.9457507
17	.1208025	.2257808	.3596976	.5054461	.6439500	.7609428	.8500234	.9118514
18	.0748248	.1541729	.2670934	.4030363	.5449215	.6757580	.7839488	.8631331
19	.0440046	.1008460	.1899885	.3283480	.4462282	.5176886	.6131884	.7048196
20	.0245927	.0620872	.1284587	.2261875	.3491889	.4843279	.6161009	.7316572
21	.0130736	.0366481	.0833175	.1589351	.2636226	.3891533	.5230588	.6480438
22	.0066178	.0206308	.0514653	.1069674	.1911698	.3013566	.4280168	.5577930
23	.0031932	.0110851	.0304420	.0689579	.1331017	.2246968	.3390037	.4655894
24	.0014703	.0054988	.0172441	.0423916	.0889629	.1571427	.2509410	.3714921
25	.0006467	.0027923	.0093280	.0252139	.0570849	.1112647	.1909410	.2939997
26	.0002720	.0013113	.0048387	.0143133	.0333173	.0718606	.1356145	.2219333
27	.0001095	.0005898	.0024059	.0077958	.0208176	.0471626	.0988053	.1617461
28	.0000422	.0002543	.0011475	.0040762	.0118398	.0289739	.0611880	.1137661
29	.0000156	.0001552	.0001552	.0005474	.0017388	.0047388	.0108599	.0237091
30	.0000055	.0000418	.0002311	.0009864	.0034048	.0097483	.0217951	.0505581
31	.0000019	.0000159	.0000977	.0004589	.0017233	.0053431	.0140407	.0319442
32	.0000006	.0000059	.0000397	.0002051	.0008398	.0028216	.0079882	.0194777
33	.0000002	.0000021	.0000156	.0000882	.0003243	.0011362	.0034384	.0114435
34	.0000001	.0000007	.0000059	.0000324	.0001284	.0004738	.0013208	.0045139
35		.0000002	.0000021	.0000146	.0000779	.0003338	.0011860	.0035747
36		.0000001	.0000007	.0000056	.0000328	.0001526	.0005852	.0018951
37			.0000003	.0000021	.0000133	.0000673	.0002789	.0009709
38			.0000001	.0000008	.0000052	.0000287	.0001285	.0004808
39				.0000003	.0000020	.0000118	.0000578	.0002303
40				.0000001	.0000007	.0000047	.0000246	.0001067
41					.0000003	.0000018	.0000103	.0000478
42					.0000001	.0000007	.0000041	.0000207
43						.0000002	.0000016	.0000087
44						.0000001	.0000006	.0000035
45							.0000002	.0000014
46							.0000001	.0000008
47								.0000005
48								.0000001
p	.17	.18	.19	.20	.21	.22	.23	.24
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	.9999998	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	.9999999	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	.9999993	.9999987	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
8	.9999987	.9999943	.9999984	.9999996	.9999999	1.0000000	1.0000000	1.0000000
9	.9999935	.9999784	.9999935	.9999981	.9999995	.9999999	1.0000000	1.0000000
10	.9997847	.9999276	.9999767	.9999928	.9999979	.9999994	.9999998	1.0000000

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

	.17	.18	.19	.20	.21	.22	.23	.24
11	.9993938	.9997887	.9999256	.9999752	.9999923	.9999977	.9999993	.9999998
12	.9984849	.9994096	.9997850	.9999256	.9999751	.9999921	.9999976	.9999993
13	.9964038	.9983359	.9994331	.9997908	.9999262	.9999761	.9999920	.9999975
14	.9922955	.9966629	.9986269	.9994658	.9997994	.9999288	.9999786	.9999970
15	.9847339	.9898613	.9969248	.9987238	.9994958	.9998100	.9999716	.9999976
16	.97118207	.9861908	.9935978	.9971848	.9988233	.9995316	.9998821	.99999385
17	.9513230	.9746726	.9875495	.9942031	.9974380	.9989230	.9995687	.99990381
18	.9209468	.9536791	.9772845	.9888097	.9947735	.9976811	.9990709	.9996047
19	.8787780	.9291619	.9609647	.9796709	.9889730	.9953065	.9979118	.9991184
20	.8237740	.8911138	.9305858	.9651809	.9818434	.9911043	.9958028	.9981884
21	.7561787	.8410016	.9022748	.9432960	.9688649	.9838835	.9930813	.9982894
22	.6777248	.7786670	.8566679	.9123773	.9493607	.9722905	.9856315	.9929143
23	.5915372	.7052752	.7992882	.8709130	.9213234	.9548403	.9753683	.9878184
24	.5017378	.6233233	.7308207	.8181930	.8838619	.9298001	.9578688	.9781467
25	.4126399	.5363723	.6531299	.7548334	.8385179	.8956713	.9378963	.9644348
26	.3290832	.4495740	.5694379	.6812174	.7763801	.8513873	.9063910	.9440743
27	.2538651	.3640702	.4683296	.5600065	.6404532	.7096220	.7659146	.81161326
28	.1893877	.2864366	.3698724	.44160776	.5007708	.5473959	.58153143	.6153143
29	.1365628	.2182705	.29193764	.3428486	.3893351	.4250399	.4518356	.4703586
30	.0951500	.1609972	.2281351	.2844416	.3307558	.3680310	.3975354	.4204143
31	.0640488	.1148993	.1668617	.2207352	.2765416	.3242701	.3630310	.3930885
32	.0416507	.0793193	.1263252	.1739448	.2220404	.2705128	.3103008	.3413985
33	.0261676	.0529598	.0963171	.1522780	.2120370	.2765381	.3450352	.4171394
34	.0158851	.0314193	.0658088	.1149647	.1825965	.2709338	.3727332	.4880320
35	.0093192	.0213587	.0436355	.0804864	.1351648	.2091127	.3004388	.4041491
36	.0052847	.0129033	.0279763	.0545227	.0965414	.1568025	.2356384	.3303654
37	.0028975	.0075414	.0173649	.0358145	.0668816	.1141794	.1797529	.2630357
38	.0015364	.0042649	.0104350	.0227946	.0449335	.0807531	.1332689	.2038811
39	.0007821	.0023143	.0060731	.0140875	.0292729	.0553762	.0959992	.13737236
40	.0003912	.0011368	.0034228	.0084008	.0184920	.0366691	.0671686	.1127040
41	.0001879	.0006145	.0018667	.0048654	.0113275	.0233192	.0456394	.0803809
42	.0000874	.0003152	.0009804	.0027313	.0067289	.0149316	.0303114	.0550969
43	.0000394	.0001317	.0005066	.0014863	.0038765	.0090880	.0192868	.0374380
44	.0000172	.0000708	.0002517	.0007842	.0021662	.0053610	.0119964	.0244705
45	.0000073	.0000320	.0001212	.0004012	.0011742	.0030708	.0072438	.0155409
46	.0000030	.0000140	.0000566	.0001991	.0006175	.0017071	.0042469	.0095866
47	.0000012	.0000060	.0000236	.0000958	.0003151	.0009312	.0024476	.0057440
48	.0000005	.0000025	.0000113	.0000446	.0001560	.0004825	.0013364	.0033440
49	.0000002	.0000010	.0000048	.0000203	.0000750	.0002454	.0007174	.0018910
50	.0000001	.0000004	.0000020	.0000089	.0000330	.0001218	.0003740	.0010389
51	.0000001	.0000001	.0000008	.0000038	.0000159	.0000581	.0001694	.0005584
52	.0000001	.0000001	.0000003	.0000016	.0000070	.0000271	.0000938	.0003975
53			.0000001	.0000006	.0000030	.0000122	.0000445	.0001449
54				.0000002	.0000012	.0000054	.0000207	.0000710
55				.0000001	.0000005	.0000023	.0000093	.0000338
56					.0000002	.0000010	.0000041	.0000156
57					.0000001	.0000005	.0000027	.0000097
58					.0000002	.0000010	.0000041	.0000156
59					.0000001	.0000005	.0000027	.0000097
60						.0000002	.0000010	.0000041
61							.0000002	.0000010
62							.0000001	.0000005

	.25	.26	.27	.28	.29	.30	.31	.32
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	.99999993	.99999996	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
14	.99999975	.99999992	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
15	.99999922	.99999973	.99999993	.99999998	.99999999	1.00000000	1.00000000	1.00000000
16	.99999776	.99999926	.99999976	.99999993	.99999998	.99999999	1.00000000	1.00000000
17	.99999398	.99999790	.99999930	.99999977	.99999993	.99999998	.99999999	1.00000000
18	.99998486	.99997444	.99999805	.99999934	.99999979	.99999993	.99999998	.99999999
19	.99996427	.99996822	.99994492	.99999821	.99999940	.99999981	.99999994	.99999998
20	.99920544	.99967822	.99986756	.99995540	.99998838	.99999545	.99999982	.99999994
21	.99833310	.99929804	.99971122	.99988885	.99995977	.99999844	.99999981	.99999984
22	.99679393	.99851962	.99934622	.99977441	.99990008	.99999933	.99999870	.99999978
23	.99572261	.99706220	.99869011	.99944410	.99977399	.99991124	.99994755	.99997185
24	.99877187	.99446417	.99744116	.99988472	.99951033	.99980114	.99992311	.99997151
25	.98065511	.99004445	.99512600	.99772723	.99988993	.99955717	.99982666	.99993300
26	.96828809	.98290554	.99183374	.99572240	.99801119	.99911187	.99962272	.99984495
27	.95820113	.97189193	.98493312	.99127081	.99606606	.99926749	.99992314	.99996792
28	.94999999	.96773500	.98156526	.99367784	.99932888	.99960606	.99986868	.99994799
29	.9413496	.95300629	.96072777	.97810011	.98837555	.99412311	.99716855	.99859982
30	.84044429	.90284400	.94028826	.96522270	.98072266	.98982293	.99488660	.99754860
31	.79600015	.86306619	.91255577	.94668709	.96927622	.98308823	.99118599	.99556738
32	.73433378	.81481413	.87649723	.92177711	.95288277	.97289149	.98518600	.99288792
33	.66553319	.75077700	.82788888	.88822278	.93448855	.96222275	.97999999	.99118599
34	.59679393	.67706220	.75869011	.82177441	.87990008	.92991124	.96994755	.99288792
35	.51299922	.59399973	.67499993	.75599998	.83699999	.91799999	.97899999	.99999999
36	.4353270	.5131429	.59461957	.67381664	.75103353	.82536600	.89199121	.95099383
37	.3605385	.4461849	.5323994	.61721548	.7007445	.78189948	.85777635	.92858538
38	.2911201	.3807947	.47246174	.56606917	.66168511	.75800373	.85475358	.95161638
39	.2294609	.3251071	.4229813	.5229797	.6250935	.7283973	.83186503	.9354076
40	.1754450	.27551071	.3787286	.4850965	.5950600	.70841720	.82376503	.93987003
41	.1307768	.1932355	.2619176	.3379237	.4206160	.5099333	.6052838	.7073003

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 139

x	.25	.26	.27	.28	.29	.30	.31	.32
42	.0948243	.1501529	.2228499	.3093357	.4071950	.5098208	.6108413	.7038768
43	.0668613	.1104600	.1707559	.2470984	.3372209	.4344093	.5384780	.6469869
44	.0458348	.0793866	.1277923	.1925000	.2727476	.3654368	.4654438	.5664971
45	.0305429	.0533634	.0931217	.1461741	.2152912	.2990728	.3938517	.4941820
46	.0197818	.0375652	.0660502	.1061411	.1657474	.2390893	.3259493	.4223395
47	.0124519	.0247864	.0455894	.0779169	.1243952	.1864445	.2636092	.3532532
48	.0076172	.0159023	.0306150	.0546592	.0909739	.1418514	.2081893	.2869225
49	.0045284	.0099195	.0199996	.0373836	.0648096	.1052213	.1604667	.2308987
50	.0026163	.0060157	.0127080	.0248034	.0449626	.0760668	.1206484	.1801888
51	.0014690	.0035468	.0078536	.0160393	.0303709	.0535761	.0884475	.1372346
52	.0008016	.0020730	.0047203	.0100916	.0199701	.0367554	.0632011	.1019896
53	.0004258	.0011329	.0027591	.0061772	.0127808	.0245557	.0440059	.0738673
54	.0002198	.0006138	.0015684	.0036785	.0079606	.0159733	.0308497	.0521667
55	.0001098	.0003233	.0008670	.0021309	.0048251	.0101153	.0197807	.0359031
56	.0000335	.0001658	.0004461	.0012008	.0028458	.0062354	.0126878	.0240750
57	.0000253	.0000825	.0002437	.0006582	.0016331	.0037412	.0079482	.0151728
58	.0000117	.0000399	.0001239	.0003509	.0009119	.0021846	.0044474	.0091008
59	.0000052	.0000188	.0000613	.0001820	.0004954	.0012415	.0026781	.0051681
60	.0000023	.0000086	.0000295	.0000918	.0002618	.0006866	.0016633	.0037389
61	.0000010	.0000038	.0000138	.0000451	.0001346	.0003695	.0009356	.0021959
62	.0000002	.0000007	.0000028	.0000100	.0000328	.0000966	.0002478	.0006297
63	.0000001	.0000003	.0000012	.0000045	.0000155	.0000489	.0001415	.0003785
64		.0000001	.0000005	.0000020	.0000071	.0000236	.0000714	.0001996
65								
66			.0000002	.0000008	.0000032	.0000111	.0000351	.0001024
67			.0000001	.0000004	.0000014	.0000050	.0000167	.0000511
68				.0000001	.0000001	.0000003	.0000013	.0000048
69				.0000001	.0000002	.0000010	.0000035	.0000117
70					.0000001	.0000004	.0000015	.0000054
71						.0000002	.0000007	.0000024
72						.0000001	.0000003	.0000011
73							.0000001	.0000005
74								.0000001
75								.0000001

x	.33	.34	.35	.36	.37	.38	.39	.40
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
14	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
15	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
16	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
17	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
18	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
19	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
20	.99999998	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
21	.99999995	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
22	.99999986	.99999996	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
23	.99999961	.99999987	.99999996	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
24	.99999899	.99999966	.99999989	.99999997	.99999999	1.00000000	1.00000000	1.00000000
25	.99999752	.99999913	.99999971	.99999990	.99999997	.99999999	1.00000000	1.00000000
26	.99999420	.99999786	.99999925	.99999973	.99999992	.99999997	.99999999	1.00000000
27	.99999170	.99999517	.99999817	.99999944	.99999985	.99999994	.99999999	.99999999
28	.99998921	.99999285	.99999573	.99999844	.99999945	.99999982	.99999994	.99999998
29	.99998699	.99999066	.99999354	.99999637	.99999868	.99999954	.99999985	.99999995
30	.99998479	.99998846	.99999134	.99999417	.99999694	.99999889	.99999962	.99999987
31	.99998256	.99998623	.99998911	.99999194	.99999471	.99999754	.99999928	.99999968
32	.99998033	.99998400	.99998687	.99998964	.99999241	.99999524	.99999798	.99999924
33	.99997810	.99998177	.99998464	.99998741	.99999018	.99999295	.99999569	.99999845
34	.99997587	.99997954	.99998241	.99998518	.99998795	.99999072	.99999348	.99999624
35	.99997364	.99997731	.99998018	.99998295	.99998572	.99998849	.99999125	.99999401
36	.99997141	.99997508	.99997795	.99998072	.99998349	.99998626	.99998902	.99999178
37	.99996918	.99997285	.99997572	.99997849	.99998126	.99998403	.99998679	.99998955
38	.99996695	.99997062	.99997349	.99997626	.99997903	.99998179	.99998456	.99998732
39	.99996472	.99996839	.99997126	.99997403	.99997680	.99997956	.99998233	.99998509
40	.99996249	.99996616	.99996903	.99997180	.99997457	.99997734	.99998010	.99998287
41	.99996026	.99996393	.99996680	.99996957	.99997234	.99997511	.99997787	.99998064
42	.99995803	.99996170	.99996457	.99996734	.99997011	.99997288	.99997564	.99997841
43	.99995580	.99995947	.99996234	.99996511	.99996788	.99997065	.99997341	.99997618
44	.99995357	.99995724	.99996011	.99996288	.99996565	.99996842	.99997118	.99997395
45	.99995134	.99995501	.99995788	.99996065	.99996342	.99996619	.99996895	.99997172
46	.99994911	.99995278	.99995565	.99995842	.99996119	.99996396	.99996672	.99996949
47	.99994688	.99995055	.99995342	.99995619	.99995896	.99996173	.99996449	.99996726
48	.99994465	.99994832	.99995119	.99995396	.99995673	.99995949	.99996226	.99996503
49	.99994242	.99994609	.99994896	.99995173	.99995450	.99995726	.99996003	.99996280
50	.99994019	.99994386	.99994673	.99994950	.99995227	.99995504	.99995780	.99996057
51	.99993796	.99994163	.99994450	.99994727	.99995004	.99995281	.99995557	.99995834
52	.99993573	.99993940	.99994227	.99994504	.99994781	.99995058	.99995334	.99995611
53	.99993350	.99993717	.99994004	.99994281	.99994558	.99994835	.99995111	.99995388
54	.99993127	.99993494	.99993781	.99994058	.99994335	.99994612	.99994888	.99995165
55	.99992904	.99993271	.99993558	.99993835	.99994112	.99994389	.99994665	.99994942
56	.99992681	.99993048	.99993335	.99993612	.99993889	.99994166	.99994442	.99994719
57	.99992458	.99992825	.99993112	.99993389	.99993666	.99993943	.99994219	.99994496
58	.99992235	.99992602	.99992889	.99993166	.99993443	.99993720	.99993996	.99994273
59	.99992012	.99992379	.99992666	.99992943	.99993220	.99993497	.99993773	.99994050

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 139

	.33	.34	.35	.36	.37	.38	.39	.40
60	.0078277	.0153184	.0281139	.0465439	.0790980	.1219815	.1785598	.2488327
61	.0047944	.0097737	.0186644	.0334938	.0566501	.0903671	.1372453	.1976978
62	.0028596	.0060745	.0120748	.0223301	.0395761	.0666316	.1030368	.1535485
63	.0016606	.0036771	.0076109	.0147716	.0269608	.0464046	.0755216	.1165201
64	.0009389	.0021676	.0046731	.0094375	.0179053	.0332015	.0540206	.0863487
65	.0005167	.0012442	.0027946	.0058746	.0115899	.0215186	.0376927	.0624631
66	.0002768	.0006953	.0016275	.0035621	.0073102	.0141052	.0256544	.0440896
67	.0001444	.0003782	.0009229	.0021036	.0044920	.0090107	.0170820	.0303558
68	.0000733	.0002003	.0005095	.0012098	.0026887	.0054087	.0110087	.0203800
69	.0000362	.0001038	.0002738	.0006774	.0015673	.0034009	.0069379	.0133383
70	.0000174	.0000518	.0001432	.0003693	.0008896	.0020085	.0042399	.0085078
71	.0000081	.0000253	.0000729	.0001959	.0004916	.0011551	.0025477	.0052874
72	.0000037	.0000120	.0000361	.0001012	.0002645	.0006468	.0014839	.0032009
73	.0000016	.0000055	.0000174	.0000509	.0001385	.0003526	.0008415	.0018673
74	.0000007	.0000025	.0000082	.0000249	.0000706	.0001871	.0004646	.0010835
75	.0000003	.0000011	.0000037	.0000118	.0000350	.0000966	.0002496	.0006055
76	.0000001	.0000005	.0000017	.0000055	.0000169	.0000485	.0001305	.0003294
77		.0000002	.0000007	.0000025	.0000079	.0000237	.0000664	.0001744
78		.0000001	.0000003	.0000011	.0000036	.0000113	.0000329	.0000896
79			.0000001	.0000005	.0000016	.0000052	.0000158	.0000450
80				.0000002	.0000007	.0000023	.0000074	.0000219
81				.0000001	.0000003	.0000010	.0000034	.0000104
82					.0000001	.0000004	.0000015	.0000048
83						.0000002	.0000006	.0000021
84						.0000001	.0000003	.0000009
85							.0000001	.0000004
86								.0000002
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AMCP 706-109

$$P(x, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 139

	.41	.42	.43	.44	.45	.46	.47	.48
65	.0981372	.1465490	.2085140	.2833918	.3688819	.4611643	.5553927	.6444397
66	.0717677	.1109058	.1630895	.2287608	.3068303	.3945606	.4878037	.5815719
67	.0513221	.0819646	.1246683	.1806335	.2499068	.3309470	.4206011	.5144360
68	.0356660	.0591340	.0930889	.1394328	.1991683	.2719048	.3556895	.4469147
69	.0242199	.0416275	.0679639	.1051566	.1552018	.2186310	.2947015	.3809811
70	.0160355	.0285839	.0462823	.0774447	.1101916	.1559718	.2139684	.2829381
71	.0103477	.0191358	.0335107	.0556710	.0879105	.1328080	.1897334	.2603770
72	.0065067	.0124893	.0226812	.0390481	.0638329	.0992894	.1473159	.2084718
73	.0039857	.0079429	.0149655	.0267073	.0452276	.0738054	.1116064	.1639800
74	.0023779	.0049213	.0096231	.0178106	.0332568	.0580993	.0886236	.1348828
75	.0013814	.0029698	.0060286	.0115758	.0210600	.0363676	.0597005	.0933804
76	.0007813	.0017451	.0036786	.0073302	.0138314	.0247533	.0428088	.0680708
77	.0004300	.0009983	.0021857	.0045211	.0085504	.0144219	.0248864	.0408430
78	.0002303	.0005550	.0012642	.0027152	.0055159	.0106151	.0193807	.0336194
79	.0001200	.0003011	.0007116	.0015874	.0033474	.0066832	.0126521	.0237430
80	.0000608	.0001587	.0003898	.0009032	.0019774	.0040970	.0080447	.0149907
81	.0000300	.0000813	.0002077	.0004999	.0011367	.0024447	.0049804	.0096838
82	.0000144	.0000405	.0001076	.0002692	.0006357	.0014193	.0030010	.0060153
83	.0000067	.0000196	.0000542	.0001409	.0003458	.0008018	.0017395	.0036892
84	.0000030	.0000092	.0000265	.0000717	.0001829	.0004404	.0010034	.0021657
85	.0000013	.0000043	.0000126	.0000355	.0000940	.0002352	.0005564	.0012466
86	.0000006	.0000019	.0000058	.0000171	.0000470	.0001220	.0002999	.0006974
87	.0000003	.0000008	.0000024	.0000060	.0000158	.0000415	.0001071	.0002794
88	.0000001	.0000003	.0000011	.0000036	.0000107	.0000301	.0000799	.0002005
89	.0000001	.0000001	.0000005	.0000016	.0000049	.0000143	.0000395	.0001039
90	.0000001	.0000002	.0000007	.0000022	.0000062	.0000166	.0000419	.0001085
91		.0000001	.0000003	.0000011	.0000035	.0000093	.0000238	.0000618
92			.0000001	.0000004	.0000013	.0000038	.0000100	.0000261
93				.0000002	.0000008	.0000022	.0000057	.0000148
94				.0000001	.0000006	.0000018	.0000047	.0000123
95					.0000001	.0000003	.0000010	.0000026
96						.0000001	.0000001	.0000004
97							.0000001	.0000001
98								.0000001

	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	1.00000000	1.00000000
19	1.00000000	1.00000000
20	1.00000000	1.00000000
21	1.00000000	1.00000000
22	1.00000000	1.00000000
23	1.00000000	1.00000000
24	1.00000000	1.00000000
25	1.00000000	1.00000000
26	1.00000000	1.00000000
27	1.00000000	1.00000000
28	1.00000000	1.00000000
29	1.00000000	1.00000000
30	1.00000000	1.00000000
31	1.00000000	1.00000000
32	1.00000000	1.00000000
33	1.00000000	1.00000000
34	1.00000000	1.00000000
35	1.00000000	1.00000000
36	1.00000000	1.00000000
37	1.00000000	1.00000000
38	.99999999	1.00000000
39	.99999999	1.00000000
40	.99999999	.99999999
41	.99999999	.99999997
42	.99999997	.99999993
43	.99999994	.99999982
44	.99999983	.99999959
45	.99999974	.99999939
46	.99999942	.99999903
47	.99999933	.99999866
48	.99999906	.99999817
49	.99999801	.99999735
50	.99999645	.99999609
51	.99999481	.99999460
52	.99999306	.99999425
53	.99999139	.99999388
54	.99998968	.99999346
55	.99998794	.99999309
56	.99998614	.99999268
57	.99998427	.99999222
58	.99998233	.99999171
59	.99998033	.99999115

$$P(0, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 139

λp	.49	.50
60	.9281998	.9858738
61	.9018378	.9367383
62	.8690357	.8871338
63	.8293869	.8385342
64	.7828277	.7915627
65	.7297067	.7467925
66	.6701170	.7045173
67	.6073785	.6645132
68	.5409694	.6273303
69	.4734115	.5933132
70	.4066214	.5620000
71	.3424504	.5328868
72	.2825330	.5057369
73	.2281633	.4814868
74	.1802193	.4597821
75	.1391353	.4402075
76	.1049255	.4223763
77	.0772470	.4057468
78	.0554890	.3907266
79	.0388724	.3778261
80	.0265451	.3664726
81	.0176621	.3562247
82	.0114456	.3476989
83	.0072209	.3403368
84	.0044334	.3346182
85	.0026480	.3301391
86	.0015380	.3265174
87	.0008693	.3235252
88	.0004764	.3210735
89	.0002539	.3190590
90	.0001314	.3173191
91	.0000640	.3158665
92	.0000322	.3146843
93	.0000152	.3137414
94	.0000070	.3130097
95	.0000031	.3124491
96	.0000013	.3120241
97	.0000006	.3117018
98	.0000002	.3114407
99	.0000001	.3112203
100		.3110201

$$P(n, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 140

X	.01	.02	.03	.04	.05	.06	.07	.08
1	.7551347	.9408914	.9859381	.9967041	.9992351	.9998271	.9999413	.9999918
2	.4088603	.7780097	.9250517	.9774781	.9936358	.9988816	.9998816	.9999878
3	.1657691	.5384735	.7941773	.9218027	.9731254	.9914886	.9979808	.9998078
4	.0528175	.1074027	.4779849	.8180916	.9834759	.9971860	.9999341	.9999786
5	.0137408	.1804226	.4107553	.6839762	.8339762	.9709989	.9970989	.9998989
6	.0030046	.0631716	.2448384	.4908136	.7058504	.8808846	.9338837	.9714389
7	.0005645	.0131074	.0831074	.3284482	.5841283	.7411153	.8660173	.9370874
8	.0000927	.0044335	.0274835	.1393148	.4012515	.6078788	.7709113	.8793831
9	.0000135	.0008150	.0051450	.0291434	.1267423	.4648008	.6819016	.7964519
10	.0000018	.0000535	.0009933	.0533825	.1648137	.3316044	.5805804	.6904893
11	.0000002	.0001305	.0034749	.0285021	.0930498	.2802825	.5909783	.6695561
12		.0000280	.0011139	.0108178	.0487679	.1768136	.4438418	.6438418
13		.0000035	.0003289	.0024705	.0133141	.0785644	.2882807	.5882807
14		.0000010	.0000889	.0005821	.0107307	.0433338	.1339966	.3301804
15		.0000002	.0000028	.0000521	.0045319	.0213643	.0662167	.1818978
16			.0000054	.0001652	.0017914	.0101061	.0345863	.0945863
17			.0000012	.0000489	.0006645	.0044769	.0180413	.0587101
18			.0000008	.0000336	.0008319	.0061854	.0098184	.0310480
19				.0000036	.0000743	.0007463	.0048309	.0163977
20				.0000009	.0000237	.0001794	.0018648	.0088114
21			.0000002	.0000007	.0000070	.0000992	.0007748	.0039069
22				.0000000	.0000080	.0000334	.0003087	.0017479
23					.0000005	.0000107	.0001148	.0007419
24					.0000001	.0000033	.0000411	.0003131
25						.0000009	.0000140	.0001898
26						.0000003	.0000046	.0000460
27						.0000001	.0000014	.0000168
28							.0000004	.0000057
29							.0000001	.0000019
30								.0000006
31								.0000009
32								.0000001

X	.09	.10	.11	.12	.13	.14	.15	.16
1	.9999988	.9999996	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	.9999977	.9999993	.9999998	.9999999	.9999999	1.0000000	1.0000000	1.0000000
3	.9999971	.9999986	.9999996	.9999998	.9999998	.9999999	1.0000000	1.0000000
4	.9999966	.9999981	.9999994	.9999997	.9999998	.9999999	.9999999	1.0000000
5	.9999938	.9999960	.9999983	.9999997	.9999998	.9999999	.9999999	.9999999
6	.9899017	.9960157	.9986351	.9995359	.9998821	.9999590	.9999883	.9999946
7	.9788263	.9890830	.9958878	.9985372	.9995041	.9998410	.9999311	.9999858
8	.9421720	.9743434	.9893879	.9938782	.9984876	.9994733	.9998553	.9999446
9	.8917691	.9471125	.9760320	.9887494	.9959875	.9984762	.9994568	.9998144
10	.8166573	.9087348	.9518213	.9779223	.9904126	.9961023	.9985011	.9994586
11	.7233334	.8381440	.9126217	.9562339	.9779586	.9910335	.9963289	.9985487
12	.6132170	.7833360	.8853639	.9281543	.9603911	.9813276	.9916877	.9965137
13	.4955042	.6520155	.7793882	.8705605	.9396019	.9642287	.9829213	.9928313
14	.3808773	.5411802	.6847086	.8029426	.8843030	.9368856	.9677714	.9845323
15	.2788035	.4294652	.5829094	.7178323	.8289008	.9065069	.9434708	.9710895
16	.1925994	.3281979	.4751450	.6210297	.7458231	.8411913	.9074487	.9494849
17	.1258852	.2468881	.3710887	.5179018	.6538575	.7710680	.8577859	.9178753
18	.0789628	.1613337	.2797998	.4153255	.5577958	.6874839	.7938600	.8786081
19	.0467785	.1046387	.1980518	.3297430	.4766663	.6292711	.7167789	.8144697
20	.0263398	.0646031	.1351753	.2360512	.3615960	.4979496	.6294833	.7433532
21	.0141103	.0391920	.0881593	.1670054	.2747468	.4084778	.5361481	.6414814
22	.0071988	.0284725	.0644537	.1138035	.2005867	.3136481	.4481833	.5788331
23	.0035014	.0180997	.0332545	.0735190	.1408806	.2354898	.3583387	.4803420
24	.0016253	.0080293	.0184780	.0457556	.0947010	.1701018	.2710829	.3908437
25	.0007208	.0030820	.0101965	.0278992	.0613291	.1188376	.2011444	.3071596
26	.0003057	.0014594	.0053326	.0158214	.0380219	.0790978	.1439135	.2334440
27	.0001241	.0006620	.0026736	.0086779	.0226838	.0509003	.0999367	.1712760
28	.0000483	.0002483	.0012880	.0045228	.0130069	.0313198	.0689304	.1244899
29	.0000180	.0000801	.0003938	.0013908	.0041714	.0117868	.0281177	.0630389
30	.0000064	.0000491	.0002635	.0011155	.0038037	.0107616	.0260543	.0548824
31	.0000022	.0000185	.0001124	.0003225	.0019419	.0059898	.0159039	.0349824
32	.0000007	.0000069	.0000461	.0002355	.0009547	.0031746	.0089961	.0214723
33	.0000002	.0000024	.0000189	.0001023	.0004582	.0016308	.0044848	.0117488
34	.0000001	.0000008	.0000069	.0000373	.0002065	.0008073	.0026308	.0073058
35		.0000003	.0000023	.0000173	.0000909	.0003858	.0013568	.0040449
36		.0000001	.0000009	.0000067	.0000386	.0001779	.0006483	.0021638
37			.0000003	.0000025	.0000159	.0000793	.0003249	.0011188
38			.0000001	.0000009	.0000063	.0000341	.0001510	.0005398
39				.0000003	.0000024	.0000148	.0000679	.0002704
40				.0000001	.0000009	.0000057	.0000295	.0001264
41					.0000003	.0000028	.0000124	.0000578
42					.0000001	.0000008	.0000051	.0000251
43						.0000006	.0000030	.0000106
44						.0000001	.0000008	.0000044
45							.0000003	.0000017
46							.0000001	.0000007
47								.0000003
48								.0000001

X	.17	.18	.19	.20	.21	.22	.23	.24
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	.9999991	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	.9999989	.9999997	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
8	.9999983	.9999995	.9999997	.9999998	1.0000000	1.0000000	1.0000000	1.0000000
9	.9999979	.9999993	.9999996	.9999998	.9999999	1.0000000	1.0000000	1.0000000
10	.9999966	.9999988	.9999997	.9999999	.9999999	.9999999	1.0000000	1.0000000

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n = 140

	.17	.18	.19	.20	.21	.22	.23	.24
11	.99994608	.99980088	.99999813	.99999791	.99999935	.99999981	.99999994	.99999996
12	.9998148	.9994767	.99998117	.99999383	.99999787	.99999933	.99999960	.99999994
13	.9997385	.99960738	.99995000	.99998177	.99999365	.99999789	.99999933	.99999979
14	.99999973	.99969997	.99997801	.99995281	.99998260	.99999387	.99999794	.99999933
15	.9840801	.99963279	.99972488	.99981915	.99993395	.99995361	.99999417	.99999994
16	.9740140	.99874093	.99948299	.99974926	.99989446	.99995999	.99998473	.99999433
17	.9340076	.99767459	.99868388	.99947995	.99977289	.99990569	.99996270	.99998590
18	.9861107	.99667119	.99799398	.99898804	.99953331	.99979543	.99991469	.99996610
19	.98897467	.99340610	.99400653	.99614987	.99908111	.99958898	.99981669	.99993331
20	.9313147	.99799888	.99412178	.99603099	.99635530	.99919803	.99962874	.99983586
21								
22	.7676699	.8500218	.90879937	.94766110	.97160668	.98541130	.99386909	.99677081
23	.6910480	.7898872	.8653332	.91856111	.95346008	.97748281	.99709938	.99937171
24	.6061891	.7184837	.8101904	.87992100	.93873693	.98366793	.99778866	.99868008
25	.470037	.6380738	.7438293	.82877880	.8917860	.93533133	.96337881	.98033311
26	.4479986	.6320833	.7679446	.8472853	.9086742	.9031803	.9484695	.9756866
27								
28	.3433818	.4443777	.5853319	.6958706	.7887993	.8611259	.9134998	.94889176
29	.6666388	.3795808	.4996610	.6169687	.7219279	.8086704	.8752222	.92328366
30	.8003488	.3004106	.4147929	.5336687	.6488741	.7461974	.8269384	.8880666
31	.1485430	.8308404	.3344582	.4496544	.5662876	.6750857	.7688760	.8437519
32	.1091902	.1713064	.2616709	.3685830	.4436973	.5476236	.7016333	.78497037
33								
34	.0693360	.1831969	.30585036	.42834764	.40239728	.5167849	.63744430	.72655370
35	.0453584	.0857937	.1495871	.2269029	.3257115	.4358794	.5488061	.6557961
36	.0287997	.0577045	.10339186	.1702114	.2563757	.3581805	.4688010	.5796615
37	.0176338	.0375754	.0712697	.1238266	.1936796	.2864007	.3908885	.5010177
38	.0144354	.0283629	.0478633	.0873741	.1453352	.2227133	.3170665	.42884419
39								
40	.0059706	.0144253	.03095815	.0597035	.1046523	.1683100	.2505536	.3480735
41	.0030304	.0083086	.0193081	.0395561	.0731101	.1233568	.1936105	.2798087
42	.0017678	.0048346	.0117584	.0253945	.0493426	.0880757	.1439608	.2198026
43	.0009133	.0026618	.0066926	.0138042	.0285610	.0609503	.1048371	.16357614
44	.0004587	.0014381	.0039326	.0095322	.0207560	.0409407	.0737996	.1285488
45								
46	.0002225	.0007429	.001640	.0055725	.0128381	.0266902	.0505911	.0880923
47	.0001045	.0003727	.0011557	.0031580	.0076246	.0166899	.0336826	.0615533
48	.0000475	.0001812	.0005982	.0017353	.0044755	.0103693	.0217780	.0417986
49	.0000210	.0000853	.0003001	.0009246	.0025253	.0061797	.0136736	.0275151
50	.0000090	.0000390	.0001460	.0004278	.0013825	.0035746	.0083369	.0176834
51								
46	.0000037	.00000173	.00000689	.00002395	.00007344	.00020071	.00049362	.0110154
47	.0000016	.00000074	.00000315	.00001165	.00003786	.00010791	.00028363	.0066667
48	.0000006	.00000031	.00000140	.00000550	.00001864	.00005940	.00018851	.00039508
49	.0000002	.00000019	.00000060	.00000252	.00000920	.00002975	.00008358	.00022397
50	.0000001	.00000005	.00000025	.00000112	.00000434	.00001485	.00004530	.0012434
51								
52		.00000009	.00000010	.00000048	.0000199	.00000780	.00002319	.0006707
53		.00000001	.00000004	.00000020	.0000088	.00000359	.00001153	.0006667
54		.00000000	.00000002	.00000009	.00000375	.00000155	.00000557	.0001791
55			.00000001	.00000005	.00000016	.00000069	.00000268	.0000687
				.00000001	.00000007	.00000030	.00000119	.0000427
56					.00000003	.00000013	.00000053	.0000200
57					.00000001	.00000005	.00000023	.0000091
58						.00000002	.00000010	.0000040
59						.00000001	.00000004	.0000017
60							.00000003	.0000007
61								.0000003
62								.0000009

DP	.25	.26	.27	.28	.29	.30	.31	.32
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	.99999994	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
14	.99999979	.99999994	.99999998	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
15	.99999936	.99999980	.99999994	.99999998	1.00000000	1.00000000	1.00000000	1.00000000
16	.99999813	.99999939	.99999961	.99999994	.99999998	1.00000000	1.00000000	1.00000000
17	.99999493	.99999825	.99999942	.99999982	.99999994	.99999998	1.00000000	1.00000000
18	.99999144	.99999534	.99999839	.99999947	.99999983	.99999993	.99999998	1.00000000
19	.99998942	.99998936	.99999577	.99999453	.99999251	.99999884	.99999995	.99999999
20	.99993146	.99997261	.99998959	.99999619	.99999667	.99999956	.99999986	.99999996
21	.9983406	.99993912	.99997563	.99999069	.99999660	.99999881	.99999960	.99999987
22	.99709922	.99887189	.99946821	.99978462	.99992176	.99996699	.99999800	.99999928
23	.99584442	.99754422	.99838373	.99901107	.99951107	.99983376	.99999376	.99999978
24	.99497086	.99651330	.99775629	.99860140	.99936347	.99983347	.99999349	.99999970
25	.98266800	.99119300	.99575431	.99860409	.99931407	.99996400	.99998565	.99999953
26	.97137350	.98447616	.99262873	.99828849	.99929555	.99985346	.99996890	.99998768
27	.95472122	.97476688	.98626339	.99538645	.99967683	.99983888	.99993968	.99997323
28	.93128470	.95389788	.97478588	.98913051	.99736737	.99931057	.99989376	.99997326
29	.89970400	.93995577	.96775629	.98601140	.99586347	.99936347	.99999349	.99999970
30	.8591696	.9103673	.94580020	.96883315	.9839462	.9911176	.99589934	.9999996
31	.8091118	.8733002	.9200419	.9520106	.9729974	.9851065	.9922915	.9961999
32	.74999037	.8270627	.88528309	.92887974	.95759984	.97536651	.98702874	.9933303
33	.68262778	.77172861	.84363089	.90803188	.9567306	.98686205	.99797151	.9986119
34	.6023405	.70609988	.79999988	.89999988	.97999988	.99999988	.99999988	.99999988
35	.5324068	.6377382	.7320674	.8110859	.8729788	.9106586	.9503784	.9711618
36	.4547432	.5686713	.6648434	.7546186	.8386832	.9085891	.9575907	.9868140
37	.3792356	.4861646	.5923844	.6951754	.7757361	.8449339	.9177284	.9538475
38	.3088897	.4138205	.5169325	.6204014	.7153153	.7955944	.8660088	.9285393
39	.2453702	.3362221	.4313504	.5468616	.6763110	.7953199	.8951397	.9613329
40	.1886455	.2710144	.3652395	.4720001	.5763021	.6740351	.7601387	.8353329
41	.1419439	.2130867	.3099562	.4303754	.5620498	.6945142	.8098874	.8807165

$$P(n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

	.25	.26	.27	.28	.29	.30	.31	.32
42	.1038185	.1686777	.2483408	.3285403	.4084871	.4884843	.5684818	.6484818
43	.0718581	.1809881	.2644133	.3432348	.4224514	.5014884	.5804818	.6594818
44	.0510915	.0874969	.1393994	.2077075	.2914448	.3804818	.4644818	.5434818
45	.0343659	.0616038	.1044888	.1691454	.2519336	.3404818	.4244818	.5034818
46	.0244791	.0421927	.0733595	.1187904	.1801131	.2570423	.3404818	.4244818
47	.0168844	.0281089	.0481138	.0773797	.1153074	.1728900	.2570423	.3404818
48	.0098825	.0162188	.0285581	.0481138	.0773797	.1153074	.1728900	.2570423
49	.0053006	.0091475	.0162188	.0285581	.0481138	.0773797	.1153074	.1728900
50	.0030943	.0070107	.0126787	.0224309	.0387973	.0648131	.1044818	.1691454
51	.0017358	.0041887	.0091645	.0184933	.0346083	.0603833	.0984898	.1509800
52	.0009488	.0024266	.0053683	.0117459	.0238883	.0418016	.0710873	.1138476
53	.0005193	.0013689	.0032886	.0073733	.0148657	.0282156	.0499564	.0888849
54	.0002707	.0007488	.0018099	.0043781	.0093385	.0182479	.0348381	.0671109
55	.0001378	.0003988	.0010564	.0025842	.0057344	.0117877	.0238883	.0418016
56	.0000674	.0002066	.0005744	.0014418	.0034158	.0073994	.0148880	.0282156
57	.0000344	.0001041	.0003038	.0007501	.0017488	.0041884	.0093385	.0182479
58	.0000151	.0000510	.0001563	.0004376	.0011710	.0028516	.0067111	.0138476
59	.0000068	.0000243	.0000782	.0002293	.0006168	.0015844	.0038883	.0093385
60	.0000030	.0000113	.0000381	.0001171	.0003296	.0008530	.0020883	.0050883
61	.0000013	.0000051	.0000160	.0000582	.0001713	.0004466	.0011618	.0028883
62	.0000005	.0000020	.0000063	.0000219	.0000649	.0001643	.0004135	.0010344
63	.0000002	.0000009	.0000037	.0000132	.0000408	.0001170	.0003171	.0008749
64	.0000001	.0000004	.0000016	.0000060	.0000205	.0000638	.0001828	.0004810
65		.0000008	.0000007	.0000007	.0000006	.0000032	.0000093	.0000368
66		.0000001	.0000003	.0000001	.0000002	.0000014	.0000043	.0000133
67			.0000001	.0000001	.0000001	.0000001	.0000002	.0000007
68				.0000001	.0000001	.0000001	.0000001	.0000001
69					.0000001	.0000001	.0000001	.0000001
70						.0000001	.0000001	.0000001
71							.0000001	.0000001
72								.0000001
73								.0000001
74								.0000001
75								.0000001

	.33	.34	.35	.36	.37	.38	.39	.40
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
14	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
15	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
16	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
17	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
18	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
19	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
20	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
21	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
22	.99999999	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
23	.99999999	.99999999	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
24	.99999999	.99999999	.99999999	.99999999	.99999999	1.00000000	1.00000000	1.00000000
25	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	1.00000000	1.00000000
26	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	1.00000000
27	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
28	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
29	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
30	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
31	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
32	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
33	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
34	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
35	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
36	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
37	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
38	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
39	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
40	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
41	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
42	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
43	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
44	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
45	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
46	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
47	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
48	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
49	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
50	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
51	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
52	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
53	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
54	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
55	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
56	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
57	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
58	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
59	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999

$$P(c_1, n_1, p) = \sum_{j=0}^n \binom{n}{j} p^j (1-p)^{n-j}$$

n = 140

x	.33	.34	.35	.36	.37	.38	.39	.40
60	.0093580	.0180630	.0327205	.0557679	.0837047	.1136892	.1497463	.1718434
61	.0657954	.0116589	.0219718	.0389119	.0549558	.0785046	.1033580	.1218157
62	.0034981	.0073322	.0113812	.0164771	.0248935	.0371071	.0533781	.0712082
63	.0020363	.0044922	.0071733	.0115646	.0172885	.0251709	.0362328	.0513714
64	.0011771	.0026888	.0057014	.0115770	.0212559	.0374717	.0624060	.0961773
65	.0006560	.0015381	.0034521	.0071572	.0139266	.0253021	.0440630	.0720174
66	.0003560	.0008819	.0020360	.0043946	.0088937	.0169223	.0303509	.0514390
67	.0001881	.0004860	.0011695	.0026207	.0055348	.0109466	.0203806	.0358493
68	.0000967	.0002608	.0006542	.0015135	.0033559	.0069014	.0123539	.0223703
69	.0000484	.0001352	.0003563	.0008691	.0019822	.0042398	.0085255	.0161850
70	.0000236	.0000693	.0001889	.0004802	.0011404	.0025376	.0053043	.0104400
71	.0000112	.0000343	.0000975	.0002583	.0006389	.0014794	.0032155	.0065755
72	.0000052	.0000165	.0000490	.0001353	.0003485	.0008400	.0018988	.0040355
73	.0000023	.0000077	.0000240	.0000690	.0001851	.0004644	.0010390	.0024127
74	.0000010	.0000035	.0000114	.0000342	.0000857	.0002250	.0005611	.0014153
75	.0000004	.0000016	.0000053	.0000165	.0000481	.0001310	.0003338	.0007967
76	.0000002	.0000007	.0000024	.0000078	.0000236	.0000668	.0001770	.0004398
77	.0000001	.0000003	.0000010	.0000035	.0000112	.0000331	.0000914	.0002364
78		.0000001	.0000004	.0000016	.0000052	.0000160	.0000459	.0001236
79			.0000002	.0000007	.0000023	.0000075	.0000225	.0000629
80			.0000001	.0000003	.0000010	.0000034	.0000107	.0000331
81				.0000001	.0000004	.0000015	.0000049	.0000150
82					.0000002	.0000007	.0000022	.0000070
83					.0000001	.0000003	.0000010	.0000032
84						.0000001	.0000004	.0000014
85							.0000002	.0000006
86							.0000001	.0000003
87								.0000001

x	.41	.42	.43	.44	.45	.46	.47	.48
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
14	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
15	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
16	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
17	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
18	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
19	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
20	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
21	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
22	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
23	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
24	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
25	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
26	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
27	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
28	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
29	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
30	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
31	.9999992	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
32	.9999980	.9999994	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
33	.9999952	.9999984	.9999995	.9999998	1.0000000	1.0000000	1.0000000	1.0000000
34	.9999989	.9999961	.9999987	.9999999	.9999999	1.0000000	1.0000000	1.0000000
35	.9999974	.9999910	.9999969	.9999990	.9999997	.9999999	1.0000000	1.0000000
36	.9999455	.9999794	.9999928	.9999975	.9999992	.9999999	.9999999	1.0000000
37	.9999860	.9999557	.9999836	.9999942	.9999981	.9999994	.9999998	.9999999
38	.9999798	.9999069	.9999642	.9999869	.9999954	.9999985	.9999995	.9999999
39	.9999508	.9998113	.9998245	.9999712	.9999896	.9999964	.9999988	.9999996
40	.9999152	.9996301	.9998462	.9999391	.9999771	.9999918	.9999972	.9999991
41	.9998456	.9992988	.9996070	.9998754	.9999412	.9999812	.9999916	.9999978
42	.9997271	.9987136	.9994225	.9997532	.9998997	.9999613	.9999858	.9999950
43	.9995326	.9977144	.9989345	.9995270	.9998002	.9999198	.9999694	.9999809
44	.9992683	.9966644	.9980054	.9991220	.9996140	.9998993	.9999363	.9999760
45	.9987588	.9954350	.9966998	.9984203	.9992804	.9996882	.9998716	.9999498
46	.9980385	.9939398	.9944532	.9972443	.9986267	.9994136	.9997492	.9998881
47	.9970578	.9921204	.9930549	.9953359	.9977203	.9984305	.9995560	.9997993
48	.9956705	.9904857	.9916756	.9933370	.9960363	.9981074	.9991274	.9996176
49	.9937944	.9862136	.9977593	.9877710	.9935377	.9967490	.9984442	.9992885
50	.9913518	.9845332	.9867030	.9810371	.9896072	.9945763	.9973068	.9987383
51	.9882610	.9830020	.9820242	.9714064	.9837543	.9912079	.9954716	.9977813
52	.9844716	.9794156	.9784225	.9658144	.9753297	.9889613	.9938558	.9969950
53	.9799453	.9748518	.9738542	.9600926	.9634699	.9787615	.9882378	.9938004
54	.9747642	.9697063	.9687163	.9516667	.9473917	.9683194	.9818175	.9900641
55	.9689418	.9638526	.9628698	.9470132	.9262024	.9539584	.9732648	.9845076
56	.9626154	.9575473	.9565613	.9350572	.9090915	.9348997	.9599256	.9764875
57	.9554243	.9503562	.9493702	.9211281	.8854230	.9103188	.9388054	.9658506
58	.9471069	.9420388	.9410528	.9061623	.8618275	.8798340	.9044317	.9349347
59	.9371289	.9320608	.9310748	.8877710	.8335377	.8467490	.8684442	.9000885
60	.9254941	.9204260	.9194400	.8610371	.8068072	.8199763	.8397368	.8700681
61	.9125919	.9075238	.9065378	.8372946	.7830647	.7962338	.8159813	.8475870
62	.8989032	.8938351	.8928491	.8135756	.7593457	.7725148	.7922623	.8248974
63	.8841143	.8790462	.8780602	.7887871	.7345572	.7477263	.7674738	.8001089
64	.8682654	.8631973	.8622113	.7629378	.7087079	.7218770	.7416245	.7742596

AMCP 706-109

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 140

x	.41	.42	.43	.44	.45	.46	.47	.48
65	.1116207	.1644656	.2309537	.3099060	.3984599	.4923349	.5864384	.6786735
66	.0825792	.1258759	.1826221	.2527984	.3347535	.4285193	.5195705	.6127085
67	.0596458	.0941211	.1411894	.2018095	.2755224	.3602092	.4531863	.5466613
68	.0420440	.0687837	.1066676	.1575611	.2219973	.2990648	.3841873	.4793850
69	.0289128	.0489803	.0787100	.1202381	.1749840	.2431477	.3233564	.4188980
70	.0193910	.0340617	.0567021	.0896379	.1348462	.1934442	.2652160	.3483860
71	.0126796	.0231042	.0393625	.0652515	.1015370	.1504594	.2129809	.2881363
72	.0080815	.0152812	.0273379	.0463605	.0746678	.1144319	.1671992	.2333860
73	.0050193	.0098524	.0182832	.0321361	.0536000	.0849860	.1283429	.1849403
74	.0030371	.0061904	.0119203	.0217253	.0375433	.0616841	.0962455	.1432846
75	.0017900	.0037895	.0075742	.0143191	.0256487	.0436042	.0704744	.1084703
76	.0010273	.0022595	.0046891	.0091983	.0170846	.0300959	.0503651	.0801904
77	.0005740	.0013119	.0028276	.0055751	.0110918	.0205543	.0351099	.0578648
78	.0003129	.0007416	.0016624	.0033528	.0070164	.0133888	.0238679	.0407347
79	.0001652	.0004081	.0009492	.0020837	.0043212	.0084919	.0158145	.0279637
80	.0000851	.0002185	.0005282	.0012042	.0025939	.0052867	.0108102	.0187118
81	.0000426	.0001138	.0002860	.0006774	.0015150	.0032048	.0064306	.0121979
82	.0000208	.0000577	.0001506	.0003707	.0008612	.0018911	.0039313	.0077474
83	.0000098	.0000284	.0000772	.0001974	.0004762	.0010859	.0023430	.0047901
84	.0000045	.0000136	.0000364	.0001022	.0002562	.0006066	.0013887	.0028826
85	.0000020	.0000063	.0000186	.0000514	.0001340	.0003396	.0007668	.0016877
86	.0000009	.0000029	.0000088	.0000232	.0000681	.0001741	.0004304	.0009421
87	.0000004	.0000013	.0000040	.0000126	.0000337	.0000894	.0002242	.0005321
88	.0000002	.0000005	.0000018	.0000055	.0000162	.0000446	.0001168	.0002864
89	.0000001	.0000002	.0000007	.0000025	.0000075	.0000216	.0000585	.0001497
90		.0000001	.0000003	.0000011	.0000034	.0000102	.0000286	.0000760
91			.0000001	.0000005	.0000015	.0000046	.0000136	.0000375
92			.0000001	.0000003	.0000010	.0000031	.0000082	.0000219
93				.0000001	.0000003	.0000010	.0000032	.0000083
94					.0000001	.0000004	.0000018	.0000050
95						.0000001	.0000008	.0000026
96						.0000001	.0000002	.0000007
97							.0000001	.0000003
98								.0000001

x	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	1.0000000	1.0000000
8	1.0000000	1.0000000
9	1.0000000	1.0000000
10	1.0000000	1.0000000
11	1.0000000	1.0000000
12	1.0000000	1.0000000
13	1.0000000	1.0000000
14	1.0000000	1.0000000
15	1.0000000	1.0000000
16	1.0000000	1.0000000
17	1.0000000	1.0000000
18	1.0000000	1.0000000
19	1.0000000	1.0000000
20	1.0000000	1.0000000
21	1.0000000	1.0000000
22	1.0000000	1.0000000
23	1.0000000	1.0000000
24	1.0000000	1.0000000
25	1.0000000	1.0000000
26	1.0000000	1.0000000
27	1.0000000	1.0000000
28	1.0000000	1.0000000
29	1.0000000	1.0000000
30	1.0000000	1.0000000
31	1.0000000	1.0000000
32	1.0000000	1.0000000
33	1.0000000	1.0000000
34	1.0000000	1.0000000
35	1.0000000	1.0000000
36	1.0000000	1.0000000
37	1.0000000	1.0000000
38	1.0000000	1.0000000
39	.9999999	1.0000000
40	.9999997	.9999995
41	.9999993	.9999990
42	.9999984	.9999985
43	.9999968	.9999980
44	.9999914	.9999971
45	.9999813	.9999934
46	.9999607	.9999856
47	.9999297	.9999695
48	.9998840	.9999378
49	.9998242	.9998948
50	.9997497	.9998478
51	.9996671	.9997934
52	.9995787	.9997366
53	.9994839	.9996780
54	.9993833	.9996187
55	.9992780	.9995587
56	.9991683	.9994981
57	.9990543	.9994370
58	.9989367	.9993754
59	.9988155	.9993133

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 140

α	.49	.50
60	.9382832	.9622246
61	.9147532	.9460062
62	.8851087	.9247362
63	.8488143	.8976340
64	.8086417	.8640790
65	.7587360	.8137081
66	.6994730	.7745052
67	.6384634	.7288655
68	.5735099	.6636217
69	.5065149	.6000219
70	.4393485	.5336566
71	.3738943	.4663434
72	.3118986	.3999708
73	.2548045	.3363783
74	.2037119	.2771345
75	.1592665	.2234948
76	.1216883	.1762919
77	.0908095	.1359210
78	.0661504	.1023650
79	.0470146	.0752638
80	.0325855	.0539938
81	.0220148	.0377754
82	.0144917	.0257618
83	.0092910	.0171178
84	.0057993	.0110775
85	.0035228	.0069787
86	.0020819	.0042783
87	.0011965	.0025513
88	.0006685	.0014794
89	.0003629	.0008338
90	.0001914	.0004566
91	.0000980	.0002428
92	.0000487	.0001254
93	.0000235	.0000628
94	.0000110	.0000305
95	.0000050	.0000144
96	.0000022	.0000066
97	.0000009	.0000029
98	.0000004	.0000012
99	.0000002	.0000005
100	.0000001	.0000002
101		.0000001

$$F(a, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 141

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.7575834	.9420736	.9863600	.9968359	.9992772	.9998374	.9999640	.9999922
2	.4123233	.7753874	.9268783	.9762471	.9939131	.9983743	.9995831	.9999161
3	.1682000	.5373640	.7981036	.9240898	.9741508	.9918372	.9975701	.9993113
4	.0539470	.3121091	.6135707	.8193601	.9259864	.9735038	.9905531	.9963588
5	.0141316	.1535662	.4166722	.6688974	.8384512	.9299291	.9723318	.9898867
6	.0031120	.0649166	.2498159	.4971193	.7122567	.8554689	.9347519	.9730455
7	.0005809	.0239067	.1328445	.3348643	.5617087	.7477391	.8706377	.9399311
8	.0000974	.0077685	.0630751	.2045169	.4088969	.6151234	.7775607	.8841835
9	.0000143	.0022512	.0269317	.1135314	.2741813	.4733375	.6602317	.8031094
10	.0000019	.0005873	.0104126	.0875079	.1694024	.3395962	.5297170	.6989113
11	.0000002	.0001300	.0036687	.0266949	.0966087	.2269120	.4000444	.5793188
12		.0000301	.0011847	.0114032	.0509820	.1412546	.3038081	.4554704
13		.0000060	.0003525	.0045035	.0249668	.0630234	.1890275	.3388033
14		.0000011	.0000971	.0016500	.0113799	.0445071	.1182361	.2381128
15		.0000002	.0000248	.0035629	.0246418	.0826130	.0695194	.1580964
16			.0000059	.0001794	.0019284	.0107816	.0384735	.0991715
17			.0000013	.0000533	.0007508	.0048354	.0200712	.0588807
18			.0000003	.0000150	.0002535	.0020421	.0098866	.0330810
19			.0000001	.0000040	.0000841	.0008146	.0046056	.0175660
20				.0000010	.0000264	.0003075	.0020324	.0088660
21				.0000002	.0000078	.0001100	.0008509	.0043112
22				.0000001	.0000022	.0000373	.0003385	.0017921
23					.0000005	.0000131	.0001882	.0008124
24					.0000002	.0000037	.0000462	.0003490
25						.0000011	.0000159	.0001380
26						.0000003	.0000058	.0000522
27						.0000001	.0000016	.0000123
28							.0000005	.0000025
29							.0000001	.0000008
30								.0000007
31								.0000002
32								.0000001
x	.09	.10	.11	.12	.13	.14	.15	.16
1	.9999903	.9999996	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	.9999749	.9999994	.9999987	.9999997	.9999999	1.0000000	1.0000000	1.0000000
3	.9998129	.9999511	.9999876	.9999970	.9999993	.9999998	1.0000000	1.0000000
4	.9990705	.9997294	.9999245	.9999797	.9999948	.9999987	.9999997	.9999999
5	.9965373	.9988797	.9996553	.9998987	.9999714	.9999922	.9999980	.9999995
6	.9896726	.9962929	.9987438	.9995957	.9998759	.9999635	.9999897	.9999972
7	.9742835	.9897780	.9931900	.9786594	.9955324	.9985753	.9995677	.9998744
8	.9449309	.9758176	.9901029	.9619711	.9983200	.9995248	.9998441	.9999513
9	.8963054	.9408356	.9775011	.9905728	.9963864	.9986175	.9995116	.9998357
10	.8252374	.9071730	.9544844	.9792391	.9911334	.9964349	.9986443	.9995106
11	.7324585	.8446732	.9169337	.9588385	.9809696	.9917419	.9966241	.9986533
12	.6231815	.7618077	.8616622	.9257085	.9628829	.9826523	.9917419	.9966241
13	.5060090	.6621466	.7763655	.8767665	.9336045	.9666169	.9842613	.9930136
14	.3911938	.5522637	.6968923	.8105407	.8901919	.9407136	.9700404	.9857826
15	.2872921	.4406367	.5943273	.7279733	.8308826	.9021599	.9471159	.9731899
16	.2002887	.3356246	.4869991	.6326460	.7558484	.8490215	.9188520	.9528816
17	.1325265	.2443739	.3825349	.5302772	.6675538	.7808993	.8655352	.9284192
18	.0832488	.1606691	.2975908	.4276347	.5705433	.6993577	.8034489	.8775188
19	.0496751	.1112082	.2067669	.3312129	.4706831	.6079131	.7283360	.8377719
20	.0281793	.0698767	.1420917	.2460942	.3740851	.515437	.6425259	.7547402
21	.0152110	.0418631	.0933310	.1752909	.2860367	.4158466	.5501539	.6745321
22	.0078200	.0239285	.0586063	.1196557	.2102232	.3260843	.4562294	.5865032
23	.0038242	.0113059	.0351964	.0782812	.1484425	.2542649	.3705250	.4950466
24	.0017942	.0068103	.0202264	.0490872	.1006744	.1792476	.2932738	.4049115
25	.0008022	.0033967	.0111295	.0295140	.0655804	.1255158	.2116531	.3205011
26	.0003430	.0012217	.0058646	.0170227	.0410388	.0845797	.1525011	.2452553
27	.0001404	.0004417	.0029660	.0094831	.0246778	.0548479	.1052927	.1813101
28	.0000551	.0001753	.0005886	.0018183	.0048328	.0108464	.0214120	.0379488
29	.0000207	.0000639	.0002000	.0005886	.0017930	.0045693	.0097746	.0182003
30	.0000075	.0000253	.0000898	.0002565	.0007415	.0019023	.0048805	.0093402
31	.0000026	.0000085	.0000290	.0000836	.0002139	.0005349	.0013064	.0026443
32	.0000009	.0000030	.0000103	.0000300	.0000750	.0001830	.0004483	.0008873
33	.0000003	.0000010	.0000031	.0000082	.0000203	.0000517	.0001270	.0002520
34	.0000001	.0000003	.0000009	.0000023	.0000058	.0000144	.0000354	.0000712
35		.0000000	.0000003	.0000008	.0000020	.0000050	.0000123	.0000246
36		.0000001	.0000001	.0000000	.0000004	.0000010	.0000027	.0000055
37			.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
38			.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
39			.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
40			.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
41				.0000000	.0000000	.0000000	.0000000	.0000000
42				.0000000	.0000000	.0000000	.0000000	.0000000
43				.0000000	.0000000	.0000000	.0000000	.0000000
44				.0000000	.0000000	.0000000	.0000000	.0000000
45				.0000000	.0000000	.0000000	.0000000	.0000000
46					.0000000	.0000000	.0000000	.0000000
47					.0000000	.0000000	.0000000	.0000000
48					.0000000	.0000000	.0000000	.0000000
x	.17	.18	.19	.20	.21	.22	.23	.24
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	.9999993	.9999998	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	.9999965	.9999990	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
8	.9999983	.9999958	.9999988	.9999997	.9999999	1.0000000	1.0000000	1.0000000
9	.9999972	.9999938	.9999952	.9999986	.9999996	.9999999	1.0000000	1.0000000

$$P(c, n, p) = \sum_{r=0}^c \binom{n}{r} p^r (1-p)^{n-r}$$

n = 141

x	.17	.18	.19	.20	.21	.22	.23	.24
10	.9999317	.9999448	.9999627	.9999948	.9999985	.9999996	.9999999	1.0000000
11	.9995196	.9998318	.9999438	.9999820	.9999945	.9999984	.9999995	.9999999
12	.9967583	.9995165	.9998352	.9999440	.9999818	.9999943	.9999981	.9999995
13	.9970690	.9988142	.9995592	.9998412	.9999454	.9999820	.9999943	.9999983
14	.9936356	.9973045	.9998169	.9999580	.9998492	.9999476	.9999826	.9999944
15	.9872062	.9942345	.9975393	.9990028	.9996135	.9998587	.9999504	.9999833
16	.9760567	.9885287	.9948034	.9977684	.9990895	.9996464	.9998690	.9999537
17	.9580730	.9786653	.9897496	.9953381	.9979884	.9991748	.9996776	.9998799
18	.9309892	.9627453	.9810370	.9908706	.9958362	.9981969	.9992373	.9997085
19	.8921774	.9386710	.9669477	.9831766	.9914950	.9962967	.9983923	.9993358
20	.8421044	.9044602	.9455589	.9707245	.9851139	.9928278	.9967197	.9985738
21	.7787972	.8586511	.9149544	.9517350	.9741155	.9868579	.9936721	.9971059
22	.7040853	.8007114	.8735907	.9243810	.9572714	.9771568	.9864269	.9944350
23	.6206175	.7311380	.8206675	.8870802	.9328485	.9622321	.9798810	.9919834
24	.5321652	.6532479	.7564381	.8388342	.9025585	.9404321	.9666736	.9843874
25	.4430913	.5675124	.6823628	.7755279	.8553577	.9102491	.9472772	.9706468
26	.3577090	.4801539	.6010445	.7101415	.8007429	.8703809	.9201624	.9533986
27	.2756860	.3945983	.5159423	.6327491	.7359708	.8202115	.8840275	.9290975
28	.2116204	.3146073	.4309179	.5503404	.6626354	.7599414	.8380549	.8964119
29	.1548600	.2451170	.3497173	.4644602	.5832661	.6907302	.7821458	.8543874
30	.1095601	.1819686	.2754995	.3847493	.5010559	.6146652	.7170729	.8026768
31	.0749212	.1318566	.2105054	.3084858	.4194702	.5345694	.6445068	.7417127
32	.0495176	.0924689	.1559166	.2402176	.3418155	.4536786	.5668948	.6727787
33	.0316317	.0627479	.1119002	.1815497	.2708572	.3752509	.4872026	.5979490
34	.0195315	.0411986	.0777970	.1311042	.2085544	.3021857	.4085774	.5198971
35	.0116590	.0261728	.0523867	.0946327	.1559473	.2367246	.3397763	.4416034
36	.0067296	.0160893	.0341640	.0652296	.1131957	.1802793	.2658531	.3660177
37	.0037568	.0095719	.0215794	.0435856	.0797340	.1334024	.2059379	.2957362
38	.0020289	.0055120	.0132018	.0282301	.0544917	.0958815	.1551498	.2327529
39	.0010602	.0030729	.0078236	.0177236	.0361296	.0669179	.1136306	.1783185
40	.0005363	.0016589	.0044918	.0107867	.0232352	.0453428	.0808771	.1339137
41	.0002626	.0008674	.0024988	.0063644	.0144961	.0298253	.0559291	.0963618
42	.0001246	.0004393	.0013472	.0036409	.0097735	.0190436	.0375717	.0679227
43	.0000572	.0002156	.0007041	.0020198	.0051515	.0118032	.0245161	.0465398
44	.0000255	.0001026	.0003568	.0010867	.0029349	.0071014	.0155376	.0309913
45	.0000110	.0000473	.0001753	.0005672	.0016225	.0041477	.0095643	.0200589
46	.0000046	.0000212	.0000835	.0002872	.0008705	.0023520	.0057183	.0126158
47	.0000019	.0000092	.0000386	.0001411	.0004533	.0012949	.0033208	.0077104
48	.0000007	.0000039	.0000173	.0000673	.0002292	.0006923	.0018733	.0045794
49	.0000003	.0000016	.0000075	.0000311	.0001125	.0003595	.0010266	.0026411
50	.0000001	.0000006	.0000032	.0000140	.0000535	.0001813	.0005466	.0014825
51		.0000002	.0000013	.0000061	.0000248	.0000888	.0002627	.0006882
52		.0000001	.0000005	.0000026	.0000112	.0000423	.0001421	.0004282
53			.0000002	.0000011	.0000049	.0000195	.0000694	.0002205
54			.0000001	.0000004	.0000021	.0000088	.0000330	.0001104
55				.0000002	.0000009	.0000038	.0000152	.0000537
56				.0000001	.0000003	.0000016	.0000068	.0000254
57					.0000001	.0000001	.0000003	.0000017
58						.0000001	.0000001	.0000005
59							.0000001	.0000002
60								.0000010
61							.0000001	.0000004
62								.0000002
63								.0000001

x	.25	.26	.27	.28	.29	.30	.31	.32
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13	.9999995	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
14	.9999983	.9999995	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
15	.9999946	.9999984	.9999995	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
16	.9999843	.9999949	.9999984	.9999995	.9999999	1.0000000	1.0000000	1.0000000
17	.9999573	.9999855	.9999953	.9999985	.9999996	.9999999	1.0000000	1.0000000
18	.9999090	.9999410	.9999867	.9999956	.9999986	.9999996	.9999999	1.0000000
19	.9997385	.9999018	.9999647	.9999879	.9999960	.9999988	.9999996	.9999999
20	.9994096	.9997670	.9999123	.9999684	.9999891	.9999964	.9999989	.9999997
21	.9987409	.9994783	.9997939	.9999223	.9999720	.9999904	.9999968	.9999990
22	.9974565	.9988937	.9995415	.9999018	.9999316	.9999754	.9999915	.9999978
23	.9951214	.9977734	.9990325	.9995993	.9998417	.9999403	.9999785	.9999926
24	.9910940	.9957368	.9980583	.9991577	.9996517	.9998626	.9999483	.9999814
25	.9844937	.9922187	.9968868	.9983133	.9992701	.9996968	.9998814	.9999534
26	.9741971	.9864338	.9938204	.9967766	.9985406	.9993704	.9997410	.9998983
27	.9580843	.9773655	.9881603	.9941102	.9972113	.9987423	.9994594	.9997784
28	.9371438	.9637948	.9801889	.9896936	.9948987	.9975959	.9989805	.9995379
29	.9076389	.9443820	.9681851	.9827010	.9910529	.9955984	.9979349	.9990773
30	.8693164	.9178046	.9508853	.9721047	.9849381	.9922548	.9962093	.9988327
31	.8216243	.8839428	.9269974	.9567804	.9755986	.9869098	.9933151	.9967487
32	.7647087	.8390845	.8955614	.9353983	.9619481	.9787075	.9886633	.9942483
33	.6994843	.7861136	.8551393	.9066610	.9427823	.9666239	.9814688	.9908034
34	.6276748	.7246396	.8060012	.8698761	.9169251	.9495184	.9707983	.9839162
35	.5516413	.6560312	.7488709	.8244360	.8833773	.9262380	.9555704	.9745181
36	.4741595	.5882367	.6829939	.7704196	.8414863	.8957280	.9346849	.9609973
37	.3981185	.5060978	.6119045	.7083826	.7911057	.8572214	.9069865	.9422628
38	.3261762	.4300805	.5378883	.6402836	.7327087	.8103962	.8717101	.9178436

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$$F(n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 141

	.25	.26	.27	.28	.29	.30	.31	.32
39	.2605501	.3569833	.4617576	.5676231	.6674287	.7547735	.8203343	.8650206
40	.2027747	.2891344	.3879778	.4929960	.5970093	.6933002	.7768670	.8449731
41	.1536693	.2283834	.3183923	.4189908	.5236640	.6253703	.7179038	.7969160
42	.1133453	.1757846	.2549912	.3480942	.4498652	.5536452	.6526600	.7410059
43	.0813422	.1317830	.1991585	.2804492	.3709558	.4654622	.5583361	.6437948
44	.0567816	.0961690	.1516145	.2236740	.3106047	.4082398	.5106314	.6115552
45	.0385473	.0683348	.1124484	.1727652	.2492060	.3393060	.4383771	.5408708
46	.0254455	.0472392	.0812228	.1300898	.1951483	.2756242	.3684033	.4683671
47	.0163313	.0317707	.0571202	.0954547	.1490684	.2186667	.3027946	.3977807
48	.0101908	.0207953	.0391011	.0682297	.1110253	.1693265	.2432147	.3305811
49	.0061819	.0132367	.0260497	.0474950	.0805952	.1279160	.1907944	.2666797
50	.0036459	.0081862	.0168877	.0321922	.0570052	.0948323	.1460953	.2133921
51	.0020904	.0049276	.0106526	.0212417	.0392761	.0676703	.1091441	.1655195
52	.0011523	.0028847	.0061361	.0126334	.0243550	.0437358	.0799820	.1253220
53	.0006314	.0016424	.0039036	.0081774	.0152217	.0282914	.0504925	.0839280
54	.0003328	.0009095	.0022676	.0051088	.0109556	.0214482	.0391108	.0667096
55	.0001706	.0004096	.0012814	.0030721	.0067854	.0138752	.0263877	.0466686
56	.0000850	.0002364	.0007045	.0017760	.0040910	.0087413	.0173457	.0320992
57	.0000417	.0001307	.0003769	.0009924	.0024005	.0053624	.0111078	.0214255
58	.0000214	.0000648	.0001961	.0005414	.0013715	.0031629	.0064390	.0123943
59	.0000108	.0000312	.0000993	.0002875	.0007626	.0018626	.0042079	.0088303
60	.0000040	.0000146	.0000489	.0001485	.0004127	.0010544	.0024890	.0054507
61	.0000017	.0000067	.0000234	.0000747	.0002173	.0005811	.0014336	.0032772
62	.0000007	.0000030	.0000109	.0000365	.0001114	.0003118	.0008040	.0018190
63	.0000003	.0000013	.0000057	.0000174	.0000568	.0001638	.0004390	.0010442
64	.0000001	.0000005	.0000022	.0000081	.0000270	.0000828	.0002334	.0006077
65		.0000002	.0000009	.0000036	.0000128	.0000409	.0001208	.0003286
66		.0000001	.0000004	.0000016	.0000059	.0000197	.0000608	.0001730
67			.0000002	.0000007	.0000026	.0000092	.0000298	.0000886
68			.0000001	.0000003	.0000011	.0000042	.0000142	.0000442
69				.0000005	.0000019	.0000066	.0000215	.0000671
70				.0000002	.0000008	.0000030	.0000102	.0000312
71					.0000001	.0000003	.0000013	.0000047
72						.0000001	.0000006	.0000021
73							.0000001	.0000009
74							.0000001	.0000004
75								.0000002
76								.0000001

	.33	.34	.35	.36	.37	.38	.39	.40
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
14	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
15	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
16	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
17	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
18	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
19	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
20	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
21	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
22	.9999991	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
23	.9999976	.9999992	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
24	.9999936	.9999979	.9999993	.9999998	.9999999	1.0000000	1.0000000	1.0000000
25	.9999840	.9999945	.9999982	.9999994	.9999998	1.0000000	1.0000000	1.0000000
26	.9999619	.9999864	.9999953	.9999985	.9999999	.9999999	1.0000000	1.0000000
27	.9999133	.9999676	.9999885	.9999961	.9999987	.9999996	.9999999	1.0000000
28	.9998114	.9998265	.9999727	.9999903	.9999967	.9999989	.9999997	.9999999
29	.9996607	.9998403	.9999381	.9999771	.9999919	.9999973	.9999991	.9999997
30	.9992147	.9996673	.9998656	.9999482	.9999810	.9999933	.9999978	.9999993
31	.9984933	.9993345	.9997197	.9998875	.9999569	.9999843	.9999945	.9999982
32	.9972211	.9987206	.9994386	.9997651	.9999063	.9999644	.9999871	.9999955
33	.9950672	.9976336	.9989181	.9995286	.9998048	.9999224	.9999707	.9999895
34	.9915630	.9957839	.9979385	.9990891	.9996360	.9998376	.9999362	.9999761
35	.9860807	.9927572	.9964093	.9983038	.9992364	.9996728	.9998660	.9999478
36	.9778256	.9879904	.9938039	.9969533	.9985727	.9993682	.9997289	.9998901
37	.9658536	.9807600	.9896712	.9947167	.9974250	.9988041	.9994709	.9997769
38	.9491199	.9701897	.9833572	.9911464	.9955181	.9978325	.9990086	.9995480
39	.9285630	.9522669	.9740524	.9856500	.9924375	.9962085	.9981838	.9991780
40	.8972208	.9350111	.9608201	.9774846	.9876686	.9935648	.9967997	.9984640
41	.8603579	.9083760	.9426511	.9655725	.9805265	.9894407	.9943441	.9973144
42	.8156534	.8745753	.9185509	.9495433	.9701936	.9832149	.9909917	.9953936
43	.7632164	.8331170	.8876531	.9478078	.9855744	.9974129	.9985580	.9993447
44	.7037537	.7839456	.8493486	.8996591	.9368076	.9613095	.9776839	.9876681
45	.6385224	.7275271	.8034101	.8643932	.9104814	.9438087	.9662889	.9807163
46	.5698668	.6648779	.7500901	.8163333	.8782988	.9280675	.9506678	.9707310
47	.4980786	.5975238	.6907170	.7714369	.8388438	.8911131	.9298848	.9568389
48	.4278070	.5273904	.6249581	.7143652	.7915701	.8544749	.9028886	.9381175
49	.3588476	.4566371	.5569110	.6514972	.7374291	.8104993	.8691639	.9136766
50	.2949442	.3874591	.4859125	.5847791	.6770795	.7593439	.8288407	.8887913
51	.2370305	.3218867	.4168888	.5149113	.6116633	.7016539	.7800989	.8448163
52	.1861335	.2616131	.3493836	.4451893	.5435280	.6356535	.7251798	.7959909
53	.1427456	.2078726	.2870368	.3773104	.4740538	.5716375	.6644073	.7476833
54	.1068598	.1613636	.2306622	.3113936	.4058486	.5027363	.5951617	.6699536

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 141

	.33	.34	.35	.36	.37	.38	.39	.40
55	.0780559	.1223558	.1811939	.2544198	.3399717	.4339573	.5311827	.6260067
56	.0556147	.0905539	.1390594	.2021246	.2790560	.3672647	.4624337	.5592255
57	.0386402	.0653929	.1042174	.1569499	.2241145	.3044750	.3949326	.4908143
58	.0261727	.0460647	.0762240	.1190566	.1759966	.2470940	.3305744	.4228829
59	.0172792	.0316444	.0544227	.0881867	.1350688	.1961595	.2709860	.3572554
60	.0111171	.0211938	.0378959	.0637589	.1012541	.1522428	.2173894	.2957064
61	.0069691	.0138363	.0257338	.0449800	.0741129	.1154567	.1705582	.2396284
62	.0042562	.0086033	.0170379	.0309536	.0529466	.0855181	.1308002	.1999856
63	.0025321	.0054578	.0109961	.0207731	.0369065	.0618414	.0980015	.1472821
64	.0014672	.0032967	.0069165	.0135922	.0250937	.0436444	.0717061	.1115829
65	.0008280	.0019398	.0042393	.0086694	.0166384	.0300517	.0512168	.0825773
66	.0004550	.0011118	.0025316	.0053891	.0107559	.0201826	.0356986	.0596703
67	.0002435	.0006206	.0014728	.0032644	.0067776	.0132174	.0242739	.0420852
68	.0001269	.0003374	.0008346	.0019265	.0041621	.0084386	.0160974	.0289619
69	.0000644	.0001786	.0004606	.0011075	.0024905	.0052513	.0104086	.0194411
70	.0000318	.0000920	.0002475	.0006202	.0014519	.0031845	.0065606	.0127860
71	.0000153	.0000462	.0001295	.0003382	.0008245	.0018815	.0040301	.0081213
72	.0000071	.0000225	.0000660	.0001796	.0004560	.0010830	.0024123	.0050515
73	.0000033	.0000107	.0000327	.0000929	.0002456	.0006071	.0014067	.0030619
74	.0000014	.0000050	.0000158	.0000467	.0001268	.0003314	.0007990	.0018081
75	.0000006	.0000022	.0000074	.0000229	.0000657	.0001762	.0004419	.0010400
76	.0000003	.0000010	.0000031	.0000109	.0000327	.0000912	.0002380	.0005826
77	.0000001	.0000004	.0000015	.0000051	.0000158	.0000459	.0001248	.0003178
78		.0000002	.0000007	.0000023	.0000074	.0000225	.0000637	.0001687
79		.0000001	.0000003	.0000010	.0000034	.0000107	.0000314	.0000872
80			.0000001	.0000004	.0000015	.0000050	.0000153	.0000438
81				.0000002	.0000007	.0000022	.0000072	.0000215
82				.0000001	.0000004	.0000015	.0000051	.0000152
83					.0000001	.0000004	.0000015	.0000047
84						.0000002	.0000006	.0000021
85						.0000001	.0000003	.0000009
86							.0000001	.0000004
87								.0000002
88								.0000001

	.41	.42	.43	.44	.45	.46	.47	.48
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
14	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
15	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
16	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
17	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
18	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
19	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
20	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
21	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
22	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
23	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
24	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
25	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
26	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
27	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
28	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
29	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
30	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
31	.9999999	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
32	.9999998	.9999995	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
33	.9999996	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
34	.9999995	.9999997	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
35	.9999980	.9999991	.9999997	.9999993	.9999998	.9999999	1.0000000	1.0000000
36	.9999957	.9999984	.9999994	.9999982	.9999994	.9999998	1.0000000	1.0000000
37	.9999910	.9999957	.9999975	.9999957	.9999986	.9999996	.9999999	1.0000000
38	.9999817	.9999874	.9999925	.9999901	.9999966	.9999989	.9999997	.9999999
39	.9999640	.9999815	.9999946	.9999921	.9999981	.9999994	.9999999	.9999997
40	.9999310	.9999706	.9999879	.9999933	.9999987	.9999993	.9999998	.9999994
41	.9998740	.9999379	.9999761	.9999904	.9999962	.9999984	.9999993	.9999984
42	.9997754	.9998594	.9999540	.9999870	.9999929	.9999970	.9999989	.9999984
43	.9996127	.9998133	.9999443	.9999626	.9999845	.9999938	.9999971	.9999974
44	.9994521	.9997588	.9998462	.9999302	.9999691	.9999875	.9999951	.9999962
45	.9993487	.9996540	.9997999	.9998729	.9999430	.9999757	.9999902	.9999962
46	.9992448	.9995772	.9997117	.9997618	.9998593	.9999399	.9999867	.9999889
47	.9991481	.9995030	.9996255	.9996156	.9997154	.9998152	.9999304	.9999846
48	.9990379	.9994183	.9995257	.9994855	.9995826	.9996850	.9998143	.9999704
49	.9989162	.9993209	.9994177	.9993773	.9994680	.9995739	.9997653	.9999485
50	.9987822	.9992192	.9992996	.9992404	.9993175	.9994258	.9996414	.9999191
51	.9986380	.9991097	.9991767	.9991039	.9991881	.9992754	.9994338	.9998839
52	.9984849	.9989959	.9990634	.9990085	.9990665	.9991465	.9993143	.9998488
53	.9983243	.9988921	.9989603	.9989153	.9989731	.9990450	.9992079	.9998055
54	.9981573	.9987859	.9988548	.9988198	.9988775	.9989494	.9991073	.9997582
55	.9979850	.9986398	.9987094	.9986744	.9987321	.9988040	.9989560	.9997064
56	.9978082	.9984839	.9985543	.9985193	.9985770	.9986489	.9988009	.9996500
57	.9976278	.9983239	.9983951	.9983601	.9984178	.9984897	.9986417	.9995936
58	.9974440	.9981594	.9982314	.9981964	.9982541	.9983260	.9984780	.9995372
59	.9972578	.9979779	.9980506	.9980156	.9980733	.9981452	.9982972	.9994808
60	.9970692	.9977893	.9978628	.9978278	.9978855	.9979574	.9981094	.9994244
61	.9968782	.9975983	.9976718	.9976368	.9976945	.9977664	.9979184	.9993680
62	.9966848	.9974049	.9974784	.9974434	.9975011	.9975730	.9977250	.9993116
63	.9964890	.9972091	.9972826	.9972476	.9973053	.9973772	.9975292	.9992552
64	.9962908	.9970109	.9970844	.9970494	.9971071	.9971790	.9973310	.9991988
65	.9960902	.9968110	.9968845	.9968495	.9969072	.9969791	.9971311	.9991424
66	.9958872	.9966080	.9966815	.9966465	.9967042	.9967761	.9969281	.9990860
67	.9956818	.9964026	.9964761	.9964411	.9964988	.9965707	.9967227	.9990296
68	.9954740	.9961938	.9962673	.9962323	.9962900	.9963619	.9965139	.9989732
69	.9952638	.9959826	.9960561	.9960211	.9960788	.9961507	.9963027	.9989168
70	.9950512	.9957700	.9958435	.9958085	.9958662	.9959381	.9960901	.9988604
71	.9948362	.9955550	.9956285	.9955935	.9956512	.9957231	.9958751	.9988040
72	.9946188	.9953376	.9954111	.9953761	.9954338	.9955057	.9956577	.9987476
73	.9943990	.9951158	.9951893	.9951543	.9952120	.9952839	.9954359	.9986912
74	.9941768	.9948926	.9949661	.9949311	.9949888	.9950607	.9952127	.9986348
75	.9939522	.9946680	.9947415	.9947065	.9947642	.9948361	.9949881	.9985784
76	.9937252	.9944400	.9945135	.9944785	.9945362	.9946081	.9947601	.998522

AMCP 706-109

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 141

	.41	.42	.43	.44	.45	.46	.47	.48
59	.4509917	.5470777	.6400794	.7251371	.7986854	.8588378	.9053835	.9394649
60	.3844044	.4791444	.5746676	.6656524	.7475693	.8173157	.8734921	.9163084
61	.3211653	.4119139	.5078285	.6017772	.6904132	.7687758	.8348413	.8870819
62	.2628110	.3472677	.4356729	.5251346	.6138145	.6987963	.7783883	.8528837
63	.2104867	.2868641	.3739143	.4675706	.5627569	.6541944	.7378501	.8126069
64	.1648915	.2320149	.3117082	.4010025	.4954964	.5899939	.6793387	.7598874
65	.1262752	.1836081	.2545154	.3372576	.4286427	.5233414	.6167498	.7036763
66	.0944862	.1420836	.2034047	.2779258	.3634214	.4560811	.5509985	.6429317
67	.0690485	.1074581	.1590055	.2242446	.3021764	.3901042	.4838869	.5783639
68	.0492267	.0793906	.1215120	.1770304	.2460836	.3271909	.4178063	.5116464
69	.0342966	.0572725	.0830731	.1166602	.1591400	.2148593	.2788629	.3466870
70	.0232949	.0403275	.0616555	.0910200	.1299082	.1833078	.2462580	.3147166
71	.0154313	.0277063	.0471035	.0759815	.1165261	.1702540	.2374996	.3170346
72	.0099667	.0185669	.0327235	.0546725	.0867589	.1310230	.1886884	.2596789
73	.0052748	.0121325	.0217671	.0383949	.0630805	.0985328	.1466053	.2061943
74	.0028498	.0077284	.0146563	.0263060	.0447688	.0723715	.1113313	.1632745
75	.0013403	.0047979	.0094430	.0175778	.0310013	.0518933	.0825868	.1251818
76	.0007598	.0029021	.0059297	.0114514	.0209385	.0363097	.0598154	.0937648
77	.0004195	.0017099	.0036280	.0072712	.0137886	.0247815	.0422789	.0685808
78	.0002255	.0009812	.0021623	.0044986	.0085504	.0164915	.0291513	.0489569
79	.0001180	.0005298	.0012550	.0027112	.0055352	.0106973	.0195993	.0340938
80	.0000600	.0001578	.0003901	.0009092	.0020005	.0041624	.0082017	.0153836
81	.0000297	.0000812	.0002088	.0005056	.0011554	.0024954	.0051013	.0098846
82	.0000143	.0000407	.0001088	.0002736	.0006495	.0014563	.0030895	.0062096
83	.0000071	.0000198	.0000551	.0001441	.0003552	.0008271	.0018214	.0037982
84	.0000031	.0000094	.0000271	.0000738	.0001890	.0004570	.0010448	.0022618
85	.0000014	.0000043	.0000130	.0000367	.0000978	.0002456	.0005831	.0013099
86	.0000006	.0000019	.0000060	.0000178	.0000492	.0001283	.0003164	.0007380
87	.0000002	.0000008	.0000027	.0000084	.0000240	.0000652	.0001669	.0004043
88	.0000001	.0000004	.0000012	.0000038	.0000114	.0000322	.0000856	.0002153
89	.0000001	.0000001	.0000005	.0000017	.0000053	.0000154	.0000426	.0001114
90								
91		.0000001	.0000002	.0000007	.0000024	.0000072	.0000206	.0000560
92			.0000001	.0000003	.0000010	.0000038	.0000107	.0000273
93				.0000001	.0000004	.0000014	.0000044	.0000129
94					.0000002	.0000006	.0000020	.0000059
95					.0000001	.0000002	.0000008	.0000027
96						.0000001	.0000003	.0000011
97							.0000001	.0000005
98							.0000001	.0000002
99								.0000001

	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
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8	1.0000000	1.0000000
9	1.0000000	1.0000000
10	1.0000000	1.0000000
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12	1.0000000	1.0000000
13	1.0000000	1.0000000
14	1.0000000	1.0000000
15	1.0000000	1.0000000
16	1.0000000	1.0000000
17	1.0000000	1.0000000
18	1.0000000	1.0000000
19	1.0000000	1.0000000
20	1.0000000	1.0000000
21	1.0000000	1.0000000
22	1.0000000	1.0000000
23	1.0000000	1.0000000
24	1.0000000	1.0000000
25	1.0000000	1.0000000
26	1.0000000	1.0000000
27	1.0000000	1.0000000
28	1.0000000	1.0000000
29	1.0000000	1.0000000
30	1.0000000	1.0000000
31	1.0000000	1.0000000
32	1.0000000	1.0000000
33	1.0000000	1.0000000
34	1.0000000	1.0000000
35	1.0000000	1.0000000
36	1.0000000	1.0000000
37	1.0000000	1.0000000
38	1.0000000	1.0000000
39	.9999999	1.0000000
40	.9999998	.9999999
41	.9999995	.9999999
42	.9999988	.9999996
43	.9999972	.9999991
44	.9999938	.9999979
45	.9999863	.9999953
46	.9999708	.9999895
47	.9999398	.9999775
48	.9998795	.9999533
49	.9997661	.9998059
50	.9995593	.9996159
51	.9991937	.9996503
52	.9985671	.9993548

$$P(r, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

	.49	.50
53	.9975249	.9988434
54	.9958435	.9979847
55	.9932109	.9965853
56	.9892099	.9943715
57	.9831065	.9909719
58	.9748484	.9859023
59	.9630791	.9785602
60	.9471716	.9682314
61	.9262839	.9541154
62	.8990355	.9353712
63	.8665988	.9111851
64	.8267965	.8808565
65	.7801848	.8436935
66	.7271438	.8001066
67	.6684561	.7496854
68	.6053371	.6932416
69	.5393474	.6318218
70	.4722600	.5668192
71	.4059669	.5000000
72	.3422734	.4331608
73	.2827777	.3681782
74	.2287473	.3067554
75	.1810447	.2507146
76	.1401016	.1998934
77	.1059401	.1561065
78	.0782334	.1191435
79	.0563911	.0888149
80	.0396557	.0646288
81	.0271944	.0458846
82	.0181780	.0317686
83	.0118393	.0214398
84	.0075102	.0140977
85	.0046383	.0090281
86	.0027880	.0056285
87	.0016303	.0034148
88	.0009272	.0020153
89	.0005126	.0011566
90	.0002755	.0006452
91	.0001438	.0003497
92	.0000729	.0001841
93	.0000359	.0000941
94	.0000171	.0000467
95	.0000079	.0000226
96	.0000036	.0000105
97	.0000016	.0000047
98	.0000007	.0000021
99	.0000003	.0000009
100	.0000001	.0000004
101		.0000001
102		.0000001

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 142

	.01	.02	.03	.04	.05	.06	.07	.08
1	.7600075	.9432321	.9867692	.9969625	.9991133	.9998472	.9999665	.9999988
2	.4137759	.7787211	.9864626	.9795907	.9941813	.9984221	.9994099	.9999038
3	.1706412	.5420266	.8019668	.9261984	.9751389	.9922294	.9977109	.9993581
4	.0550695	.3166034	.6191067	.8235469	.9383680	.9736638	.9910443	.9971436
5	.0145297	.1567369	.4225791	.6749159	.8428265	.9324834	.9736070	.9804522
6	.0032222	.0666896	.2548216	.5039904	.7185664	.8599365	.9373885	.9743928
7	.0006142	.0247288	.1363537	.3413737	.5692361	.7548029	.8751237	.9425706
8	.0001084	.0080913	.0651682	.2097314	.4165375	.6230603	.7840838	.8864369
9	.0000151	.0023615	.0280160	.1171708	.2809171	.4816446	.6684453	.8095889
10	.0000020	.0006205	.0109001	.0597488	.1746414	.3476206	.5368331	.7078466
11	.0000002	.0001480	.0038710	.0279274	.1002484	.2336730	.4091215	.5886654
12		.0000322	.0012592	.0120168	.0532433	.1463940	.2918444	.4653782
13		.0000065	.0003775	.0047796	.0262676	.0855773	.1936628	.3481358
14		.0000012	.0001047	.0017641	.0120592	.0467580	.1231915	.2461658
15		.0000002	.0000270	.0006064	.0051687	.0239267	.0728986	.1644993
16			.0000065	.0001948	.0020741	.0114909	.0406467	.1038854
17			.0000015	.0000586	.0007812	.0051903	.0213594	.0620497
18			.0000003	.0000166	.0003769	.0022095	.0105925	.0350849
19			.0000001	.0000044	.0000926	.0008883	.0049753	.0188024
20				.0000011	.0000292	.0003379	.0022325	.0095620
21				.0000003	.0000088	.0001218	.0009336	.0046894
22				.0000001	.0000025	.0000317	.0003744	.0021840
23					.0000007	.0000136	.0001489	.0009301
24					.0000002	.0000042	.0000520	.0003884
25						.0000012	.0000160	.0001549
26						.0000004	.0000060	.0000390
27						.0000001	.0000019	.0000190
28							.0000006	.0000075
29							.0000003	.0000028
30								.0000008
31								.0000003
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$$P(r, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 142

	.17	.18	.19	.20	.21	.22	.23	.24
9	.9999537	.9999859	.9999959	.9999982	.9999997	.9999999	1.0000000	1.0000000
10	.9999514	.9999510	.9999850	.9999955	.9999987	.9999997	.9999999	1.0000000
11	.9999577	.9999831	.9999913	.9999946	.9999953	.9999966	.9999996	.9999999
12	.9999877	.9999897	.9999933	.9999951	.9999985	.9999982	.9999986	.9999996
13	.9999363	.9999606	.9999616	.9999618	.9999530	.9999057	.9999953	.9999786
14	.9999193	.9999599	.9999089	.9999171	.9999694	.9999551	.9999853	.9999954
15	.9999093	.9999771	.9999810	.9999195	.9999646	.9999783	.9999957	.9999960
16	.9999321	.9999557	.9999333	.9999053	.9999200	.9999331	.9999877	.9999608
17	.9999102	.9999407	.9999090	.9999221	.9999196	.9999282	.9999217	.9999776
18	.9999356	.9999610	.9999189	.9999741	.9999282	.9999412	.9999950	.9999749
19	.9999710	.9999004	.9999633	.9999715	.9999337	.9999714	.9999912	.9999852
20	.9999783	.9999612	.9999627	.9999214	.9999371	.9999505	.9999704	.9999756
21	.9999598	.9999666	.9999763	.9999532	.9999650	.9999711	.9999730	.9999788
22	.9999764	.9999111	.9999449	.9999275	.9999087	.9999291	.9999333	.9999760
23	.9999070	.9999382	.9999729	.9999464	.9999773	.9999515	.9999465	.9999935
24	.9999281	.9999702	.9999647	.9999420	.9999324	.9999438	.9999713	.9999816
25	.9999330	.9999810	.9999637	.9999380	.9999769	.9999930	.9999784	.9999478
26	.9999240	.9999784	.9999650	.9999408	.9999220	.9999519	.9999698	.9999582
27	.9999449	.9999983	.9999917	.9999275	.9999730	.9999487	.9999385	.9999726
28	.9999118	.9999056	.9999725	.9999221	.9999359	.9999200	.9999286	.9999356
29	.9999503	.9999953	.9999454	.9999363	.9999336	.9999567	.9999049	.9999473
30	.9999611	.9999753	.9999600	.9999215	.9999301	.9999395	.9999397	.9999073
31	.9999000	.9999768	.9999643	.9999305	.9999603	.9999505	.9999197	.9999344
32	.9999362	.9999567	.9999285	.9999312	.9999230	.9999746	.9999745	.9999228
33	.9999673	.9999977	.9999633	.9999393	.9999773	.9999505	.9999317	.9999081
34	.9999585	.9999775	.9999766	.9999733	.9999380	.9999260	.9999661	.9999685
35	.9999974	.9999775	.9999814	.9999270	.9999940	.9999126	.9999137	.9999397
36	.9999567	.9999944	.9999767	.9999110	.9999215	.9999697	.9999521	.9999151
37	.9999262	.9999745	.9999707	.9999444	.9999609	.9999715	.9999718	.9999201
38	.9999326	.9999828	.9999736	.9999312	.9999726	.9999361	.9999711	.9999089
39	.9999249	.9999519	.9999654	.9999249	.9999441	.9999326	.9999300	.9999137
40	.9999654	.9999114	.9999249	.9999271	.9999426	.9999093	.9999410	.9999354
41	.9999392	.9999098	.9999775	.9999249	.9999313	.9999391	.9999667	.9999157
42	.9999140	.9999516	.9999660	.9999415	.9999728	.9999415	.9999739	.9999748
43	.9999607	.9999625	.9999214	.9999344	.9999383	.9999361	.9999718	.9999081
44	.9999309	.9999122	.9999427	.9999271	.9999404	.9999358	.9999702	.9999724
45	.9999135	.9999057	.9999098	.9999671	.9999281	.9999797	.9999382	.9999683
46	.9999057	.9999059	.9999101	.9999332	.9999284	.9999270	.9999602	.9999402
47	.9999011	.9999113	.9999047	.9999178	.9999409	.9999275	.9999372	.9999877
48	.9999000	.9999040	.9999024	.9999214	.9999282	.9999244	.9999204	.9999318
49	.9999004	.9999030	.9999024	.9999184	.9999170	.9999327	.9999121	.9999107
50	.9999001	.9999000	.9999000	.9999174	.9999060	.9999205	.9999057	.9999140
51	.9999000	.9999000	.9999000	.9999077	.9999107	.9999109	.9999134	.9999070
52	.9999000	.9999000	.9999000	.9999077	.9999140	.9999052	.9999174	.9999081
53	.9999000	.9999000	.9999000	.9999077	.9999062	.9999048	.9999081	.9999081
54	.9999000	.9999000	.9999000	.9999006	.9999027	.9999011	.9999043	.9999068
55	.9999000	.9999000	.9999000	.9999002	.9999011	.9999049	.9999013	.9999067
56	.9999000	.9999000	.9999000	.9999001	.9999004	.9999002	.9999008	.9999032
57	.9999000	.9999000	.9999000	.9999000	.9999002	.9999009	.9999003	.9999050
58	.9999000	.9999000	.9999000	.9999000	.9999001	.9999004	.9999007	.9999068
59	.9999000	.9999000	.9999000	.9999000	.9999001	.9999007	.9999007	.9999030
60	.9999000	.9999000	.9999000	.9999000	.9999001	.9999007	.9999007	.9999013
61	.9999000	.9999000	.9999000	.9999000	.9999000	.9999001	.9999000	.9999005
62	.9999000	.9999000	.9999000	.9999000	.9999000	.9999000	.9999000	.9999000
63	.9999000	.9999000	.9999000	.9999000	.9999000	.9999000	.9999000	.9999000

	.25	.26	.27	.28	.29	.30	.31	.32
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
13	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
14	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
15	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
16	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000
17	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000
18	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000
19	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
20	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
21	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
22	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
23	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
24	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
25	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
26	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
27	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
28	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
29	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
30	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
31	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
32	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
33	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
34	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
35	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
36	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
37	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999

[illegible]

$$P(x, y, z) = \sum_{i=1}^n \sum_{j=1}^m \sum_{k=1}^p p_{ijk} x_i y_j z_k$$

n = 14

	.33	.34	.35	.36	.37	.38	.39	.40
54	.1107031	.1771899	.2503933	.3362756	.4308917	.5289311	.6246075	.7126495
55	.0875612	.1356253	.1905076	.2755784	.3642329	.4501009	.5376945	.6213373
56	.0630803	.1013659	.1538065	.2207502	.3015948	.3926000	.4892458	.5859380
57	.0443418	.0732173	.1164121	.1737128	.2444489	.3283301	.4212550	.5182000
58	.0302870	.0506363	.0860393	.1336203	.1938000	.2680988	.3556753	.4500714
59	.0200141	.0365473	.0620589	.0992999	.1502121	.2155146	.2942268	.3815064
60	.0131506	.0247476	.0436802	.0725529	.1137653	.1699312	.2422930	.3203360
61	.0083379	.0163379	.0294905	.0517404	.0841552	.1294354	.1886224	.2620558
62	.0051514	.0105145	.0200815	.0360011	.0607781	.0966946	.1463059	.2095437
63	.0031010	.0065953	.0131107	.0244381	.0438843	.0708364	.1107990	.1643635
64	.0018186	.0040315	.0083444	.0161774	.0319465	.0555593	.0881961	.1328636
65	.0010389	.0024012	.0051764	.0104416	.0217469	.0382169	.0619207	.0941796
66	.0005781	.0013933	.0031393	.0065700	.0129384	.0239329	.0417507	.0668331
67	.0003133	.0007876	.0018434	.0040293	.0082495	.0158642	.0287095	.0491198
68	.0001651	.0004337	.0010579	.0024081	.0051898	.0102545	.0192863	.0348118
69	.0000850	.0002326	.0005915	.0014034	.0033170	.0064684	.0126878	.0238494
70	.0000435	.0001215	.0003221	.0007956	.0018362	.0039698	.0080613	.0154120
71	.0000207	.0000618	.0001708	.0004397	.0010566	.0023766	.0050170	.0099432
72	.0000109	.0000306	.0000883	.0002367	.0005933	.0013864	.0030433	.0068794
73	.0000065	.0000187	.0000444	.0001241	.0003234	.0007879	.0017789	.0038577
74	.0000030	.0000089	.0000237	.0000613	.0001720	.0004368	.0010350	.0023096
75	.0000009	.0000032	.0000104	.0000315	.0000891	.0002353	.0005818	.0013473
76	.0000004	.0000014	.0000048	.0000152	.0000449	.0001315	.0003375	.0007656
77	.0000003	.0000006	.0000029	.0000092	.0000220	.0000631	.0001689	.0004237
78	.0000001	.0000003	.0000010	.0000033	.0000105	.0000314	.0000875	.0002283
79		.0000001	.0000004	.0000015	.0000049	.0000153	.0000441	.0001198
80			.0000002	.0000006	.0000022	.0000073	.0000217	.0000618
81			.0000001	.0000003	.0000010	.0000033	.0000103	.0000304
82				.0000001	.0000004	.0000015	.0000048	.0000147
83					.0000002	.0000006	.0000022	.0000069
84					.0000001	.0000003	.0000010	.0000032
85						.0000001	.0000004	.0000014
86							.0000003	.0000006
87							.0000001	.0000003
88								.0000001

	.41	.43	.43	.44	.45	.46	.47	.48
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
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12	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
14	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
15	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
16	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
17	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
18	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
19	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
20	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
21	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
22	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
23	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
24	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
25	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
26	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
27	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
28	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
29	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
30	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
31	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
32	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
33	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
34	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000
35	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000	1.0000000
36	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000
37	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	1.0000000
38	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
39	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
40	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
41	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
42	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
43	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
44	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
45	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
46	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
47	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
48	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
49	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
50	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
51	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
52	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
53	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
54	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
55	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
56	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
57	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999

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$$F(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 142

	.41	.42	.43	.44	.45	.46	.47	.48
50	.5466834	.6404679	.7859740	.7777684	.6399608	.9064408	.9403088	.9637088
51	.4789183	.5750839	.6463830	.7448167	.9166699	.8747763	.9173988	.9460867
52	.4117089	.5076764	.6027947	.6918357	.7705715	.8364159	.8864811	.9274304
53	.3470933	.4401507	.5368873	.6898883	.7161329	.7512122	.8530072	.9011077
54	.2867142	.3744191	.4607318	.5644375	.6658585	.7394486	.8107194	.8640575
55	.2319397	.3198336	.4081905	.4478988	.5988878	.6818418	.7617249	.8289028
56	.1835854	.2550516	.3384568	.4302985	.5277436	.6195888	.7065570	.7889873
57	.1421078	.2039390	.2791083	.3653054	.4580883	.5540016	.6461463	.7303409
58	.1075197	.1595234	.2255823	.3040318	.3995674	.4870806	.5819014	.6788891
59	.0794780	.1220008	.1780971	.2478643	.3329736	.4204536	.5184138	.6093564
60	.0573737	.0911790	.1374342	.1978047	.2713253	.3581310	.4485384	.5436708
61	.0404319	.0665681	.1039673	.1544831	.2186146	.2958978	.3831173	.4767963
62	.0278036	.0474444	.0767390	.1178676	.1783688	.2404861	.3099041	.4103988
63	.0186554	.0330072	.0553002	.0879145	.1309980	.1914388	.2633493	.3468628
64	.0128072	.0244058	.0389069	.0644885	.1001542	.1490998	.2116894	.2878068
65	.0077885	.0148349	.0267118	.0453370	.0737358	.1134780	.1663844	.2389040
66	.0048441	.0092761	.0178901	.0316951	.0530091	.0844054	.1279101	.1846386
67	.0029343	.0060887	.0116647	.0214182	.0371267	.0613133	.0960967	.1434684
68	.0017341	.0036943	.0074404	.0141470	.0255467	.0434782	.0705180	.1088447
69	.0009277	.0022102	.0044178	.0091105	.0170060	.0300844	.0505511	.0806491
70	.0005591	.0013872	.0027926	.0055186	.0110786	.0203049	.0353213	.0587763
71	.0003050	.0007300	.0014453	.0034976	.0070270	.0133686	.0240887	.0412881
72	.0001690	.0004031	.0009439	.0020640	.0043456	.0085717	.0160191	.0308404
73	.0000830	.0002167	.0005273	.0012093	.0026617	.0053578	.0103337	.0190886
74	.0000428	.0001134	.0002848	.0006332	.0013357	.0028222	.0056585	.0112493
75	.0000206	.0000577	.0001518	.0003757	.0008771	.0019543	.0040380	.0077736
76	.0000098	.0000286	.0000782	.0002011	.0004874	.0011165	.0024174	.0049857
77	.0000044	.0000138	.0000342	.0000867	.0002168	.0005628	.0011498	.0023990
78	.0000020	.0000065	.0000191	.0000510	.0001388	.0003428	.0008001	.0017465
79	.0000009	.0000029	.0000090	.0000261	.0000710	.0001883	.0004418	.0010123
80	.0000004	.0000013	.0000043	.0000125	.0000353	.0000942	.0002372	.0005445
81	.0000002	.0000006	.0000019	.0000058	.0000171	.0000474	.0001238	.0003040
82	.0000001	.0000003	.0000008	.0000026	.0000080	.0000231	.0000628	.0001613
83		.0000001	.0000003	.0000012	.0000037	.0000110	.0000310	.0000826
84			.0000001	.0000005	.0000016	.0000051	.0000148	.0000411
85			.0000001	.0000002	.0000007	.0000023	.0000069	.0000198
86			.0000001	.0000001	.0000003	.0000010	.0000031	.0000093
87				.0000001	.0000001	.0000004	.0000014	.0000040
88						.0000002	.0000006	.0000018
89						.0000001	.0000003	.0000008
90							.0000001	.0000003
91								.0000001
92								.0000001
93								.0000001
94								.0000001
95								.0000001
96								.0000001
97								.0000001
98								.0000001
99								.0000001
100								.0000001

	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	1.0000000	1.0000000
8	1.0000000	1.0000000
9	1.0000000	1.0000000
10	1.0000000	1.0000000
11	1.0000000	1.0000000
12	1.0000000	1.0000000
13	1.0000000	1.0000000
14	1.0000000	1.0000000
15	1.0000000	1.0000000
16	1.0000000	1.0000000
17	1.0000000	1.0000000
18	1.0000000	1.0000000
19	1.0000000	1.0000000
20	1.0000000	1.0000000
21	1.0000000	1.0000000
22	1.0000000	1.0000000
23	1.0000000	1.0000000
24	1.0000000	1.0000000
25	1.0000000	1.0000000
26	1.0000000	1.0000000
27	1.0000000	1.0000000
28	1.0000000	1.0000000
29	1.0000000	1.0000000
30	1.0000000	1.0000000
31	1.0000000	1.0000000
32	1.0000000	1.0000000
33	1.0000000	1.0000000
34	1.0000000	1.0000000
35	1.0000000	1.0000000
36	1.0000000	1.0000000
37	1.0000000	1.0000000
38	1.0000000	1.0000000
39	1.0000000	1.0000000
40	1.0000000	1.0000000
41	.9999997	.9999999
42	.9999993	.9999997
43	.9999988	.9999994
44	.9999983	.9999991
45	.9999979	.9999986
46	.9999974	.9999984
47	.9999969	.9999983
48	.9999964	.9999984
49	.9999959	.9999984
50	.9999954	.9999984
51	.9999949	.9999984

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 142

	.49	.50
38	.9988741	.9995026
39	.9980355	.9990971
40	.9966674	.9984141
41	.9945009	.9973850
42		
43	.9911704	.9954784
44	.9861992	.9926717
45	.9789983	.9884371
46	.9688461	.9823113
47	.9549663	.9733958
48		
49	.9365189	.9611734
50	.9126932	.9447433
51	.8827868	.9232781
52	.8462997	.8960208
53	.8030271	.8623750
54		
55	.7531364	.8220001
56	.6972131	.7748960
57	.6362654	.7214645
58	.5716798	.6625327
59	.5051304	.5993305
60		
61	.4384505	.5334196
62	.3734832	.4665804
63	.3119306	.4006695
64	.2552222	.3374673
65	.2044190	.2785355
66		
67	.1501637	.2251040
68	.1226793	.1779959
69	.0918097	.1376250
70	.0670938	.1030792
71	.0478561	.0767219
72		
73	.0333005	.0552567
74	.0225960	.0388266
75	.014453	.0266042
76	.007687	.0177687
77	.00415629	.0115629
78		
79	.0021275	.0071283
80	.0012717	.0043216
81	.0007154	.0027150
82	.0003917	.0015859
83		
84	.0002083	.0009974
85	.0001074	.0005266
86	.0000540	.0002669
87	.0000263	.0001391
88	.0000124	.0000704
89		
90	.0000057	.0000346
91	.0000025	.0000165
92	.0000011	.0000075
93	.0000005	.0000034
94	.0000002	.0000015
95		
96	.0000001	.0000006
97		
98		
99		
100		
101		
102		

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$$P(x, n, p) = \sum_{i=0}^n \binom{n}{i} p^i (1-p)^{n-i}$$

n = 143

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.7624074	.9443675	.9871661	.9970840	.9993477	.9998564	.9999689	.9999934
2	.4192182	.7820113	.9304060	.9777096	.9944379	.9985458	.9996339	.9999109
3	.1730926	.5467605	.8057677	.9281101	.9760910	.9926034	.9978438	.9994017
4	.0562451	.2211118	.4315925	.6876529	.9307066	.9747777	.9915109	.9971808
5	.0149353	.1590342	.4284750	.6808612	.8471037	.9349544	.9748876	.9909875
6	.0033352	.0684906	.2598543	.5108274	.7247794	.8642693	.9399182	.9756775
7	.0006403	.0255680	.1399077	.3478764	.5767026	.7605469	.8794837	.9450578
8	.0001075	.0084241	.0673038	.2149973	.4241725	.6309477	.7904565	.8939465
9	.0000160	.0024761	.0291306	.1208732	.2876981	.4903186	.6765400	.8159187
10	.0000021	.0006754	.0114214	.0520457	.1799552	.3556741	.5479245	.7154340
11	.0000003	.0001574	.0040821	.0292003	.1039680	.2405099	.4162027	.5863543
12		.0000346	.0013376	.0126532	.0556123	.1516308	.3001470	.4752587
13		.0000070	.0004039	.0050691	.0276173	.0892263	.2004019	.3575151
14		.0000012	.0001129	.0018848	.0127697	.0420872	.1288645	.2543418
15		.0000002	.0000293	.0005527	.0055133	.0252966	.0744479	.1710340
16			.0000071	.0002112	.0023288	.0132370	.0429065	.1067346
17			.0000016	.0000641	.0000459	.0055683	.0227095	.0653957
18			.0000003	.0000183	.00003021	.0023884	.0113527	.0372420
19			.0000001	.0000049	.00001018	.0009676	.0053690	.0210450
20				.0000012	.0000324	.0003709	.0024859	.0103013
21				.0000003	.0000098	.0001348	.0010211	.0050157
22				.0000001	.0000028	.0000465	.0004135	.0021237
23					.0000008	.0000153	.0001591	.0010856
24					.0000002	.0000048	.0000583	.0004328
25						.0000014	.0000204	.0001736
26						.0000004	.0000068	.0000667
27						.0000001	.0000022	.0000245
28							.0000007	.0000086
29							.0000004	.0000029
30							.0000001	.0000009
31								.0000003
32								.0000001
x	.09	.10	.11	.12	.13	.14	.15	.16
1	.9999956	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	.9999790	.9999952	.9999989	.9999998	.9999999	1.0000000	1.0000000	1.0000000
3	.9998400	.9999543	.9999869	.9999976	.9999994	.9999999	1.0000000	1.0000000
4	.9991994	.9997719	.9999378	.9999837	.9999959	.9999990	.9999998	.9999999
5	.9969787	.9990434	.9997121	.9999172	.9999772	.9999939	.9999985	.9999996
6	.9708731	.9967922	.9989365	.9996653	.9998945	.9999711	.9999920	.9999979
7	.8769845	.9910417	.9967320	.9988750	.9996326	.9998857	.9999660	.9999903
8	.6501012	.9785352	.9913993	.9967661	.9988521	.9996135	.9997661	.9998621
9	.4049010	.8549118	.9801927	.9918771	.9968694	.9986803	.9994064	.9997706
10	.1778478	.6155394	.9594221	.9818770	.9924255	.9970211	.9988925	.9996093
11	.7489029	.8569182	.9250100	.9636041	.9835275	.9930089	.9972043	.9989422
12	.6127177	.7781646	.8736075	.9334764	.9674515	.9851119	.9936021	.9974060
13	.5271106	.6819102	.8037111	.8882042	.9410278	.9709707	.9866097	.9941874
14	.4110944	.5741381	.7146577	.8281860	.9012403	.9477731	.9741752	.9880094
15	.3060835	.4629447	.6167489	.7475543	.8460343	.9127070	.9537995	.9770823
16	.2160842	.3566932	.5105536	.6553408	.7750915	.8636144	.9288768	.9591028
17	.1448796	.2622474	.4058516	.5547443	.6902863	.7996798	.8792199	.9319703
18	.0922685	.1638513	.2686000	.422649	.556187	.7219263	.8216660	.8930951
19	.0550455	.1228765	.2247205	.3544437	.4965986	.6513235	.7805700	.8413454
20	.0321444	.0783043	.1565158	.2666854	.3992557	.54306	.6680282	.7764933
21	.0176143	.0475990	.1042510	.1924898	.3090737	.450	.5777170	.6999126
22	.0091962	.0276162	.0664156	.1332297	.2301460	.33341	.4643710	.6144722
23	.0045793	.0153935	.0404835	.0884173	.1647442	.2648942	.3930225	.5242335
24	.0023771	.0081043	.0236220	.0562692	.1133310	.1988211	.3088148	.4377890
25	.0009992	.0041078	.0112019	.0343501	.0745141	.1406234	.2333845	.3476589
26	.0004300	.0019971	.0070719	.0201226	.0475900	.0962926	.1705270	.2656885
27	.0001790	.0009267	.0036122	.0111175	.0290699	.0633324	.1201841	.2020618
28	.0000714	.0004112	.0017913	.0066114	.0170728	.0401837	.0816867	.1463420
29	.0000273	.0001768	.0008482	.0031751	.0096460	.0245314	.0535414	.1037227
30	.0000100	.0000727	.0003861	.0015055	.0052453	.0144270	.0338455	.0693610
31	.0000045	.0000287	.0001690	.0007619	.0027465	.0081764	.0206376	.0451221
32	.0000012	.0000109	.0000712	.0003525	.0013054	.0044673	.0121415	.0286314
33	.0000004	.0000040	.0000209	.0001571	.0006736	.0023540	.0069939	.0173043
34	.0000001	.0000014	.0000113	.0000675	.0003158	.0011968	.0037790	.0101753
35		.0000005	.0000043	.0000280	.0001429	.0005673	.0020006	.0057821
36		.0000002	.0000015	.0000112	.0000624	.0002783	.0010232	.0031760
37			.0000005	.0000043	.0000263	.0001274	.0005058	.0016868
38			.0000002	.0000016	.0000107	.0000564	.0002417	.0008465
39			.0000001	.0000006	.0000042	.0000241	.0001117	.0004307
40				.0000002	.0000016	.0000100	.0000500	.0002072
41				.0000001	.0000006	.0000040	.0000216	.0000965
42					.0000002	.0000015	.0000091	.0000435
43					.0000001	.0000006	.0000037	.0000190
44						.0000002	.0000014	.0000080
45						.0000001	.0000006	.0000033
46							.0000002	.0000013
47							.0000001	.0000005
48								.0000002
49								.0000001

x	.18	.19	.20	.21	.22	.23	.24
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
7	.9999997	.9999997	.9999997	.9999997	.9999997	.9999997	.9999997
8	.9999994	.9999994	.9999994	.9999994	.9999994	.9999994	.9999994

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 143

	.17	.18	.19	.20	.21	.22	.23	.24
9	.9959594	.9999878	.9999965	.9999990	.9999997	.9999999	1.0000000	1.0000000
10	.9998688	.9999579	.9999871	.9999962	.9999989	.9999997	.9999999	1.0000000
11	.9996201	.9998701	.9999576	.9999868	.9999960	.9999989	.9999997	.9999999
12	.9990042	.9995369	.9998739	.9999582	.9999868	.9999960	.9999989	.9999997
13	.9976166	.9990739	.9996100	.9998797	.9999596	.9999871	.9999960	.9999988
14	.9947526	.9978284	.9991477	.9996820	.9998870	.9999617	.9999876	.9999961
15	.9893056	.9952898	.9980362	.9992230	.9997076	.9998951	.9999641	.9999833
16	.9797111	.9904974	.9957940	.9982361	.9992975	.9997338	.9998033	.9998668
17	.9639900	.9820014	.9915854	.9962624	.9984255	.9993697	.9997599	.9999126
18	.9399347	.9682802	.9842130	.9925761	.9966938	.9986027	.9994165	.9997852
19	.9054459	.9470735	.9721063	.9861251	.9934714	.9970802	.9987667	.9995031
20	.8589723	.9164477	.9534730	.9755150	.9878361	.9942779	.9974464	.9989171
21	.7999565	.8747666	.9262514	.9590693	.9765435	.9893634	.9950012	.9977698
22	.7291578	.8211767	.8889205	.9349680	.9640881	.9812447	.9907234	.9956477
23	.6487435	.7559420	.8403610	.9016027	.9427719	.9693461	.9856375	.9919315
24	.5620949	.6806073	.7704371	.8576937	.9129620	.9497036	.9715024	.9857577
25	.4733584	.5974228	.7101559	.8028074	.8733143	.9331308	.9658721	.9760095
26	.3868457	.5115277	.6316840	.7374928	.8232036	.8874551	.9322269	.9613565
27	.3064205	.4254567	.5481445	.6633858	.7527272	.8117874	.8601724	.9053558
28	.2350505	.3435843	.4632300	.5831032	.6830387	.7597714	.8160119	.8616180
29	.1744852	.2691209	.3807115	.4999534	.6163351	.7207504	.8073384	.8740212
30	.1252933	.2043171	.3039543	.4175204	.5354508	.6478021	.7465217	.8259400
31	.0870066	.1502545	.2355361	.3392091	.4537637	.5696165	.6774908	.7704424
32	.0584217	.1069959	.1770360	.2678447	.3746038	.4882121	.6033290	.7054079
33	.0373302	.0737607	.1290001	.2054008	.3009550	.4087878	.5175008	.6152777
34	.0231128	.0492211	.0911141	.1524913	.2351033	.3345224	.4440014	.5571764
35	.0144578	.0317935	.0623564	.1104203	.1794699	.2658954	.3688508	.4791705
36	.0084907	.0198795	.0413406	.0773536	.1315860	.2035514	.2975325	.4024548
37	.0048241	.0120337	.0265654	.0528536	.0941976	.1444914	.2139321	.3257769
38	.0026572	.0070132	.0165372	.0344238	.0654560	.1128435	.1789951	.2634053
39	.0014175	.0040035	.0099759	.0221202	.0441439	.0800760	.1322190	.2049394
40	.0007273	.0022011	.0050317	.0137043	.0288913	.0515134	.0944074	.1552316
41	.0003629	.0011725	.0031045	.0082339	.0187497	.0369462	.0670181	.1144189
42	.0001754	.0005052	.0018152	.0047983	.0113100	.0240168	.0443647	.0820411
43	.0000882	.0002628	.0009668	.0027124	.0067654	.0141664	.0308021	.0572100
44	.0000417	.0001469	.0005991	.0016775	.0043279	.0093931	.0204834	.0417719
45	.0000164	.0000691	.0002502	.0007915	.0022116	.0055320	.0124710	.0255731
46	.0000070	.0000315	.0001216	.0004098	.0012110	.0031982	.0076000	.0163896
47	.0000029	.0000140	.0000574	.0002049	.0006433	.0017950	.0045003	.0102112
48	.0000012	.0000060	.0000253	.0000997	.0003318	.0009755	.0025894	.0061845
49	.0000006	.0000025	.0000117	.0000475	.0001667	.0004479	.0011479	.0028613
50	.0000002	.0000010	.0000050	.0000216	.0000909	.0002672	.0007688	.0019043
51	.0000001	.0000004	.0000021	.0000086	.0000352	.0001336	.0004155	.0011594
52	.0000000	.0000002	.0000009	.0000042	.0000176	.0000650	.0002133	.0006276
53	.0000000	.0000001	.0000003	.0000018	.0000078	.0000307	.0001065	.0003301
54	.0000000	.0000000	.0000001	.0000007	.0000034	.0000141	.0000516	.0001688
55	.0000000	.0000000	.0000000	.0000003	.0000014	.0000063	.0000244	.0000840
56	.0000000	.0000000	.0000000	.0000001	.0000006	.0000027	.0000112	.0000407
57	.0000000	.0000000	.0000000	.0000000	.0000002	.0000012	.0000050	.0000191
58	.0000000	.0000000	.0000000	.0000000	.0000001	.0000005	.0000022	.0000088
59	.0000000	.0000000	.0000000	.0000000	.0000000	.0000002	.0000010	.0000039
60	.0000000	.0000000	.0000000	.0000000	.0000000	.0000001	.0000004	.0000017
61	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000007
62	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000003
63	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000001
25	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
26	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
27	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
28	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
29	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
30	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
31	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
32	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
33	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
34	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
35	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
36	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
37	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
38	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
39	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
40	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
41	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
42	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
43	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
44	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
45	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
46	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
47	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
48	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
49	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
50	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
51	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
52	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
53	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
54	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
55	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
56	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
57	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
58	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
59	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
60	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
61	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
62	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
63	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
25	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
26	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
27	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
28	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
29	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
30	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
31	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
32	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
33	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
34	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
35	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
36	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
37	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
38	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000	.10000000
39	.10000000	.10000000	.100					

[illegible]

$$P(n, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 143

	.33	.34	.35	.36	.37	.38	.39	.40
53	.1721994	.2451714	.3312373	.4264222	.5253060	.6219474	.7109193	.7881464
54	.1313614	.1938344	.2708560	.3598452	.4563719	.5548236	.6493728	.7349498
55	.0978377	.1497572	.2166677	.2974294	.3888967	.4822564	.5837906	.6758623
56	.0711188	.1130141	.1694519	.2406168	.3247709	.4182522	.5159408	.6180978
57	.0504387	.0832696	.1295001	.1903985	.2655891	.3527550	.4477733	.5489948
58	.0348921	.0598821	.0966652	.1472834	.2125360	.2914834	.3812525	.4773840
59	.0235381	.0420176	.0704495	.1113233	.1663397	.2358006	.3161914	.4013324
60	.0154815	.0287591	.0501127	.0821818	.1272808	.1866329	.26091064	.3455911
61	.0099261	.0191970	.0347819	.0592329	.0951110	.1444438	.2081155	.2853461
62	.0063030	.0124944	.0235496	.0414665	.0694276	.1092602	.1608873	.2267898
63	.0037777	.0079278	.0155505	.0286015	.0494779	.0807399	.1246430	.1855358
64	.0022418	.0044931	.0089126	.0151512	.0244139	.0382634	.0583857	.0871263
65	.0012962	.0025935	.0051852	.0082505	.0123350	.0184070	.02760816	.0418638
66	.0007302	.0014602	.0029203	.0043804	.0067206	.0100808	.0144008	.0216008
67	.0004007	.0008014	.0016028	.0024042	.0036063	.0054094	.0081081	.0121622
68	.0002142	.0004284	.0008568	.0012852	.0019278	.0028917	.0043376	.0066064
69	.0001115	.0002230	.0004460	.0006690	.0010035	.0015052	.0022578	.0034367
70	.0000565	.0001130	.0002260	.0003390	.0005085	.0007627	.0011441	.0017161
71	.0000279	.0000558	.0001116	.0001674	.0002511	.0003767	.0005650	.0008475
72	.0000134	.0000268	.0000536	.0000804	.0001206	.0001809	.0002714	.0004071
73	.0000067	.0000134	.0000268	.0000402	.0000603	.0000905	.0001357	.0002036
74	.0000034	.0000067	.0000134	.0000201	.0000302	.0000453	.0000679	.0001018
75	.0000017	.0000034	.0000067	.0000101	.0000151	.0000227	.0000340	.0000507
76	.0000009	.0000017	.0000034	.0000051	.0000075	.0000113	.0000170	.0000255
77	.0000005	.0000009	.0000017	.0000025	.0000038	.0000057	.0000085	.0000127
78	.0000002	.0000005	.0000009	.0000014	.0000021	.0000032	.0000048	.0000071
79	.0000001	.0000002	.0000004	.0000006	.0000010	.0000015	.0000022	.0000034
80		.0000001	.0000002	.0000003	.0000005	.0000008	.0000012	.0000019
81			.0000001	.0000002	.0000003	.0000005	.0000008	.0000012
82				.0000001	.0000002	.0000003	.0000005	.0000008
83					.0000001	.0000002	.0000003	.0000005
84						.0000001	.0000002	.0000003
85							.0000001	.0000002
86								.0000001
87								
88								
89								

	.41	.42	.43	.44	.45	.46	.47	.48
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
14	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
15	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
16	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
17	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
18	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
19	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
20	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
21	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
22	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
23	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
24	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
25	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
26	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
27	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
28	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
29	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
30	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
31	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
32	.99999992	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
33	.99999979	.99999993	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
34	.99999950	.99999984	.99999995	.99999998	1.00000000	1.00000000	1.00000000	1.00000000
35	.99999885	.99999961	.99999987	.99999996	.99999999	1.00000000	1.00000000	1.00000000
36	.99999744	.99999909	.99999969	.99999990	.99999997	.99999999	1.00000000	1.00000000
37	.99999617	.99999777	.99999928	.99999976	.99999992	.99999998	.99999999	1.00000000
38	.99999480	.99999641	.99999800	.99999944	.99999972	.99999994	.99999998	1.00000000
39	.99999343	.99999504	.99999652	.99999874	.99999957	.99999986	.99999996	.99999999
40	.99999206	.99999367	.99999515	.99999726	.99999902	.99999967	.99999998	.99999999
41	.99999069	.99999230	.99999378	.99999574	.99999766	.99999925	.99999975	.99999992
42	.99998932	.99999093	.99999241	.99999437	.99999628	.99999787	.99999946	.99999991
43	.99998795	.99998956	.99999104	.99999299	.99999489	.99999647	.99999806	.99999956
44	.99998658	.99998819	.99998967	.99999162	.99999352	.99999510	.99999669	.99999819
45	.99998521	.99998682	.99998830	.99999025	.99999215	.99999374	.99999533	.99999683
46	.99998384	.99998545	.99998693	.99998888	.99999078	.99999237	.99999396	.99999546
47	.99998247	.99998408	.99998556	.99998751	.99998941	.99999100	.99999259	.99999409
48	.99998110	.99998271	.99998419	.99998614	.99998804	.99998963	.99999122	.99999272
49	.99997973	.99998134	.99998282	.99998477	.99998667	.99998826	.99998985	.99999135
50	.99997836	.99997997	.99998145	.99998340	.99998530	.99998689	.99998848	.99998998
51	.99997699	.99997860	.99998008	.99998203	.99998393	.99998552	.99998711	.99998861
52	.99997562	.99997723	.99997871	.99998066	.99998256	.99998415	.99998574	.99998724
53	.99997425	.99997586	.99997734	.99997929	.99998119	.99998278	.99998437	.99998587
54	.99997288	.99997449	.99997597	.99997792	.99997982	.99998141	.99998300	.99998450
55	.99997151	.99997312	.99997460	.99997655	.99997845	.99998004	.99998163	.99998313
56	.99997014	.99997175	.99997323	.99997518	.99997708	.99997867	.99998026	.99998176

AMCP 706-109

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 145

x	.41	.42	.43	.44	.45	.46	.47	.48
57	.4396460	.7257657	.7999888	.8604283	.9069499	.9408098	.9641171	.9792916
58	.5742033	.6663466	.7460735	.8192294	.8754570	.9180603	.9485856	.9698697
59	.5067717	.6025471	.6921211	.7712326	.8372608	.8893259	.9281634	.9555889
60	.4392626	.5359883	.6302237	.7169015	.7922150	.8540617	.9008781	.9391114
61	.3735842	.4685115	.5648513	.6571374	.7406303	.8120059	.8696799	.9137376
62	.3114827	.4020264	.4977192	.5932443	.6832019	.7632600	.8305947	.8841296
63	.2544043	.3383515	.4307990	.5268485	.6210581	.7083407	.7847334	.8479826
64	.2034107	.2790680	.3658623	.4597752	.5556860	.6481911	.7324869	.8050829
65	.1591136	.2254063	.3046282	.3938997	.4888282	.5841429	.6745499	.7555833
66	.1217008	.1781782	.2464845	.3309921	.4233444	.5178320	.6121059	.7000499
67	.0909751	.1377603	.1984296	.2725780	.3580584	.4510745	.5466628	.6394601
68	.0664364	.1041241	.1550332	.2198309	.2976104	.3857194	.4799655	.5751999
69	.0473780	.0769012	.1184440	.1735110	.2423344	.3234960	.4138824	.5086961
70	.0329824	.0554738	.0884414	.1339520	.1931759	.2658832	.3501443	.4423704
71	.0224070	.0390708	.0645146	.1010939	.1506571	.2140005	.2904108	.3774532
72	.0148510	.0268582	.0459560	.0745495	.1148889	.1685592	.2359474	.3158413
73	.0096002	.0180146	.0319557	.0538933	.0856241	.1298499	.1876496	.2589698
74	.0060513	.0117860	.0216834	.0377551	.0623361	.0977788	.1459930	.2079100
75	.0037184	.0075195	.0143530	.0269092	.0443123	.0719357	.1104901	.1633261
76	.0022270	.0046771	.0092655	.0173464	.0307452	.0516823	.0825400	.1254640
77	.0012995	.0028355	.0058315	.0113266	.0208134	.0362456	.0599196	.0941134
78	.0007382	.0016751	.0035774	.0072110	.0137426	.0248035	.0424652	.0690769
79	.0004092	.0009640	.0021385	.0044740	.0088475	.0165561	.0293680	.0494592
80	.0002207	.0005404	.0012455	.0027060	.0055522	.0107755	.0198118	.0345598
81	.0001159	.0002950	.0007065	.0015941	.0033952	.0068352	.0130323	.0255571
82	.0000592	.0001568	.0003902	.0008147	.0017226	.0034263	.0068363	.0135977
83	.0000295	.0000811	.0002098	.0005110	.0011735	.0023451	.0046211	.0091045
84	.0000143	.0000408	.0001098	.0002779	.0006629	.0014927	.0031777	.0064043
85	.0000067	.0000200	.0000559	.0001471	.0003645	.0008523	.0018834	.0039382
86	.0000031	.0000095	.0000277	.0000758	.0001950	.0004737	.0010867	.0023581
87	.0000014	.0000044	.0000134	.0000379	.0001115	.0002861	.0006102	.0013744
88	.0000006	.0000020	.0000063	.0000185	.0000514	.0001347	.0003333	.0007796
89	.0000002	.0000009	.0000028	.0000086	.0000253	.0000689	.0001771	.0004301
90	.0000001	.0000004	.0000013	.0000040	.0000121	.0000342	.0000915	.0002308
91		.0000002	.0000005	.0000018	.0000056	.0000166	.0000459	.0001204
92		.0000001	.0000003	.0000010	.0000035	.0000106	.0000284	.0000710
93			.0000001	.0000003	.0000011	.0000035	.0000106	.0000284
94				.0000001	.0000005	.0000016	.0000049	.0000124
95				.0000001	.0000002	.0000007	.0000022	.0000067
96					.0000001	.0000003	.0000009	.0000029
97						.0000001	.0000004	.0000013
98							.0000002	.0000006
99							.0000001	.0000002
100								.0000001

x	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	1.0000000	1.0000000
8	1.0000000	1.0000000
9	1.0000000	1.0000000
10	1.0000000	1.0000000
11	1.0000000	1.0000000
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13	1.0000000	1.0000000
14	1.0000000	1.0000000
15	1.0000000	1.0000000
16	1.0000000	1.0000000
17	1.0000000	1.0000000
18	1.0000000	1.0000000
19	1.0000000	1.0000000
20	1.0000000	1.0000000
21	1.0000000	1.0000000
22	1.0000000	1.0000000
23	1.0000000	1.0000000
24	1.0000000	1.0000000
25	1.0000000	1.0000000
26	1.0000000	1.0000000
27	1.0000000	1.0000000
28	1.0000000	1.0000000
29	1.0000000	1.0000000
30	1.0000000	1.0000000
31	1.0000000	1.0000000
32	1.0000000	1.0000000
33	1.0000000	1.0000000
34	1.0000000	1.0000000
35	1.0000000	1.0000000
36	1.0000000	1.0000000
37	1.0000000	1.0000000
38	1.0000000	1.0000000
39	1.0000000	1.0000000
40	.9999999	1.0000000
41	.9999998	.9999999
42	.9999994	.9999998
43	.9999986	.9999996
44	.9999967	.9999989
45	.9999926	.9999976
46	.9999840	.9999945
47	.9999664	.9999880
48	.9999315	.9999745
49	.9998645	.9999473
50	.9997795	.9998952

$$P(o, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 143

$\frac{x}{n}$	.49	.50
51	.99951139	.99972770
52	.99911855	.99941778
53	.99844644	.99900099
54	.99733378	.99875666
55	.9955625	.9978495
56	.9928023	.9961817
57	.9886357	.9940751
58	.9825030	.9905544
59	.9738180	.9853342
60	.9617674	.9778135
61	.9455581	.9672846
62	.9243678	.9529583
63	.8974409	.9340107
64	.8641784	.9095425
65	.8242307	.8791979
66	.7775438	.8421876
67	.7246155	.7984480
68	.6651298	.7481803
69	.6013267	.6919986
70	.5377396	.6309316
71	.4711237	.5663750
72	.4055172	.5003000
73	.3420914	.4336250
74	.2810093	.3690684
75	.2293125	.3080014
76	.1810438	.2518197
77	.1410467	.2015520
78	.1069358	.1578124
79	.0792046	.1208031
80	.0572826	.0903505
81	.0404337	.0659893
82	.0278412	.0470417
83	.0186941	.0327154
84	.0122152	.0221865
85	.0078027	.0146658
86	.0048466	.0094456
87	.0029111	.0059249
88	.0017254	.0036183
89	.0009882	.0021505
90	.0005505	.0012434
91	.0002982	.0006991
92	.0001570	.0003822
93	.0000801	.0002030
94	.0000399	.0001047
95	.0000192	.0000525
96	.0000090	.0000255
97	.0000041	.0000120
98	.0000018	.0000055
99	.0000008	.0000024
100	.0000003	.0000011
101	.0000001	.0000004
102		.0000002
103		.0000001

$$P(c, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 144

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.7647834	.9454801	.9875511	.9972001	.9993003	.9998650	.9999711	.9999939
2	.4226501	.7852504	.9321288	.9804041	.9946034	.9986239	.9996574	.9999175
3	.1755571	.5514656	.8092068	.930661	.9770004	.9929159	.9978491	.9994425
4	.0574114	.1256248	.6300277	.8316792	.9329758	.9758412	.9919542	.9974873
5	.0153484	.1631578	.4343585	.6867322	.8512838	.9373410	.9759954	.9914042
6	.0044512	.0703194	.2649130	.5176881	.7300956	.8685292	.9423619	.9769023
7	.0006672	.0264264	.1435061	.3543913	.5941065	.7667714	.8837111	.9474077
8	.0001158	.0087667	.0694419	.2203126	.317990	.6307236	.7966884	.8971154
9	.0000169	.002595	.0302758	.1246382	.2245218	.4987565	.6845141	.8220754
10	.0000023	.0006910	.0119526	.0643900	.1851123	.3617520	.5569276	.7214723
11	.0000003	.0001674	.0043023	.0305141	.1077174	.2474197	.4272032	.6077207
12		.0000370	.0014199	.0133132	.0580104	.1569635	.3084109	.4831064
13		.0000075	.0004319	.0053725	.0290171	.0922705	.2092441	.3685346
14		.0000014	.0001216	.0020121	.0135120	.0514955	.1334541	.2688597
15		.0000002	.0000318	.0007020	.0056751	.0267240	.0800751	.1776968
16			.00000078	.0002289	.0023933	.0130204	.0452544	.1137185
17			.00000018	.0000700	.0009150	.0049685	.0241233	.0648628
18			.00000004	.0000301	.0003293	.0025792	.0121476	.0394943
19			.00000001	.0000054	.0001118	.0010528	.0057878	.0214760
20				.00000014	.0000359	.0004067	.0026133	.0110856
21				.00000003	.0000109	.0001490	.0011199	.0084386
22				.00000001	.0000031	.0000519	.0004562	.0035391
23					.0000009	.0000171	.0001769	.0011295
24					.0000002	.0000054	.0000654	.0004793
25					.00000001	.0000016	.0000231	.0001948
26						.0000005	.0000078	.0000753
27						.00000002	.0000025	.0000279
28							.0000006	.0000099
29							.0000002	.0000034
30							.0000001	.0000011
31								.0000003
32								.0000001
x	.09	.10	.11	.12	.13	.14	.15	.16
1	.9999987	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	.9999980	.9999996	.9999999	.9999998	1.0000000	1.0000000	1.0000000	1.0000000
3	.9999953	.9999992	.9999999	.9999997	.9999999	1.0000000	1.0000000	1.0000000
4	.9999972	.9999997	.9999999	.9999999	.9999999	.9999999	1.0000000	1.0000000
5	.9971786	.9991163	.9997169	.9999252	.9999796	.9999947	.9999986	.9999997
6	.9914226	.9970100	.9990218	.9996955	.9999096	.9999743	.9999930	.9999983
7	.9782345	.9916169	.9969745	.9986699	.9996673	.9998977	.9999699	.9999915
8	.9525207	.9797859	.9919859	.9970132	.9989536	.9996516	.9998809	.9999666
9	.9084694	.9572741	.9314272	.9034418	.9791272	.9989658	.9996429	.9998038
10	.8438837	.9194766	.9617071	.9830770	.9930032	.9972786	.9996793	.9998111
11	.7569807	.8627804	.9288033	.9657968	.9846842	.9935706	.9974375	.9994990
12	.6522816	.7860400	.8792628	.9370917	.9693414	.9862175	.9941428	.9974518
13	.5375152	.6915356	.8113997	.8937078	.9444628	.9729505	.9906586	.9947823
14	.4226338	.5849153	.7262335	.8336379	.9064127	.9510208	.9760404	.9889978
15	.3156065	.4740640	.6377388	.7569901	.8532111	.9174163	.9566558	.9788306
16	.2241860	.3673183	.5222351	.6664065	.7841141	.8704874	.9278147	.9620467
17	.1512832	.2716930	.4171019	.5668159	.7013110	.8086307	.8853783	.9368127
18	.0970035	.1916909	.3192647	.4645626	.6079235	.7328118	.8302291	.8993050
19	.0591236	.1289740	.2339473	.3661823	.5094712	.6451279	.7612344	.8496354
20	.0342793	.0827615	.1640183	.2772164	.4119103	.5511156	.6804095	.7868722
21	.0189222	.0506693	.1100001	.2011933	.3207974	.4569636	.5912444	.7121660
22	.0099555	.0296145	.0705715	.1400309	.2404066	.3711190	.5237377	.6868127
23	.0049949	.0165348	.0433361	.0917947	.1732463	.2804358	.4067249	.5386633
24	.0023933	.0088260	.0254767	.0601270	.1300147	.2081755	.3209359	.4482577
25	.0010961	.0045077	.0143481	.0369804	.0799126	.1488688	.2446090	.3614396
26	.0004803	.0022045	.0077460	.0218299	.0511497	.1025269	.1799556	.2823633
27	.0002016	.0009333	.0040112	.0123741	.0314785	.0679984	.1277352	.2128629
28	.0000811	.0004645	.0019938	.0067380	.0186324	.0434329	.0874613	.1552370
29	.0000313	.0002005	.0009520	.0035278	.0106115	.0267327	.0577632	.1094078
30	.0000116	.0000831	.0004365	.0017763	.0058174	.0158418	.0367999	.0744748
31	.0000044	.0000231	.0001229	.0008608	.0030713	.0090515	.0226188	.0489843
32	.0000014	.0000087	.0000419	.0004017	.0015623	.0049866	.0134159	.0311019
33	.0000005	.0000047	.0000335	.0001806	.0007661	.0026498	.0076810	.0190847
34	.0000001	.0000017	.0000132	.0000783	.0003623	.0013584	.0042462	.0113160
35		.0000006	.0000050	.0000327	.0001654	.0006726	.0022673	.0064850
36		.0000002	.0000018	.0000132	.0000729	.0003216	.0011698	.0035930
37		.0000001	.0000007	.0000051	.0000310	.0001485	.0005304	.0019851
38			.0000002	.0000019	.0000127	.0000663	.0003813	.0019978
39			.0000001	.0000007	.0000051	.0000286	.0001312	.0005004
40				.0000002	.0000019	.0000120	.0000592	.0002429
41				.0000001	.0000007	.0000048	.0000259	.0001143
42					.0000003	.0000019	.0000109	.0000520
43					.0000001	.0000007	.0000045	.0000229
44						.0000003	.0000018	.0000098
45						.0000001	.0000007	.0000041
46							.0000003	.0000016
47							.0000001	.0000006
48								.0000002
49								.0000001
x	.17	.18	.19	.20	.21	.22	.23	.24
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	.9999995	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	.9999997	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	.9999991	.9999993	.9999993	.9999998	1.0000000	1.0000000	1.0000000	1.0000000

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

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n = 144

x	.17	.18	.19	.20	.21	.22	.23	.24
9	.9999644	.9999894	.9999970	.9999992	.9999998	.9999999	1.0000000	1.0000000
10	.9999848	.9999933	.9999989	.9999996	.9999999	.9999999	1.0000000	1.0000000
11	.9999683	.9999859	.9999932	.9999987	.9999997	.9999999	.9999999	.9999999
12	.9999108	.9999789	.9999898	.9999963	.9999997	.9999999	.9999999	.9999997
13	.9998885	.9999753	.9999991	.9999995	.9999999	.9999999	.9999999	.9999999
14	.9998395	.9999526	.9999947	.9999992	.9999999	.9999999	.9999999	.9999999
15	.9998316	.9999568	.9999947	.9999991	.9999999	.9999999	.9999999	.9999999
16	.9913422	.9913500	.9968200	.9964315	.9993816	.9997693	.9999977	.9999970
17	.9666624	.9835663	.9923858	.9966571	.9986066	.9994490	.9997930	.9999257
18	.9440841	.9707645	.9856140	.9933134	.9970574	.9987714	.9995124	.9998150
19	.9113090	.9508907	.9744066	.9874153	.9941481	.9974214	.9989815	.9995708
20	.8668738	.9196503	.9569728	.9776370	.9890195	.9946961	.9977500	.9990578
21	.8099878	.8828492	.9314140	.9623584	.9804289	.9904446	.9955636	.9980458
22	.7411936	.8308229	.8960134	.9398043	.9671248	.9830308	.9917073	.9961570
23	.6684159	.7676842	.8495873	.9082797	.9472483	.9671398	.9858672	.9958234
24	.5768252	.6941675	.7910286	.8664752	.9192291	.9538490	.9730635	.9859394
25	.4684436	.6128060	.7338094	.8137847	.8816617	.9289760	.9596971	.9783491
26	.3155299	.5270788	.6465937	.7305537	.8337363	.8953038	.9376653	.9648732
27	.3200978	.4409495	.5640170	.6782072	.7754283	.8510343	.9075449	.9483960
28	.2471844	.3583214	.4793637	.5991597	.7076850	.7982509	.8682247	.9185151
29	.1878113	.2885309	.3963900	.5165834	.6324471	.7350990	.8191474	.8830448
30	.1336559	.2159832	.3105382	.4140070	.5324459	.6638507	.7605095	.8362395
31	.0935153	.1599850	.2445356	.3548713	.4709197	.5868173	.6933679	.7840010
32	.0632811	.1147825	.1818510	.2821176	.3912874	.5069267	.6196162	.7210162
33	.0414137	.0797430	.1381334	.2178896	.3164213	.4273351	.5418038	.6507782
34	.0262127	.0534382	.0981139	.1633932	.2489328	.3411565	.4429590	.5555007
35	.0160482	.0349304	.0670204	.1189145	.1961629	.2910091	.4060538	.4970919
36	.0095051	.0280474	.0453401	.0839669	.1414316	.2108273	.3138564	.4208664
37	.0054740	.0147825	.0247422	.0517136	.0904622	.1357246	.1969196	.2739346
38	.0030215	.0079497	.0164426	.0318208	.0714917	.1220060	.1936309	.2793344
39	.0016235	.0045524	.0112223	.0246209	.0486194	.0872049	.1437481	.2189712
40	.0008436	.0023556	.0066191	.0151874	.0320944	.0606676	.1048731	.1671615
41	.0004249	.0013576	.0037847	.0093280	.0205614	.0404066	.0743936	.1242139
42	.0002073	.0007073	.0020982	.0051854	.0127803	.0268612	.0512990	.0898118
43	.0000980	.0003572	.0011280	.0031295	.0077198	.0171060	.0343815	.0631695
44	.0000449	.0001749	.0005882	.0017325	.0045237	.0105839	.0223947	.0432123
45	.0000200	.0000831	.0002976	.0009307	.0025736	.0063594	.0141759	.0287456
46	.0000086	.0000383	.0001461	.0004851	.0014316	.0037116	.0087204	.0185936
47	.0000036	.0000171	.0000696	.0002457	.0007625	.0021043	.0052133	.0116940
48	.0000015	.0000074	.0000322	.0001207	.0003972	.0011591	.0030289	.0071509
49	.0000006	.0000031	.0000144	.0000576	.0002010	.0006203	.0017104	.0042517
50	.0000002	.0000013	.0000063	.0000267	.0000988	.0003226	.0009388	.0024579
51	.0000001	.0000005	.0000027	.0000120	.0000472	.0001630	.0005009	.0013817
52		.0000002	.0000011	.0000053	.0000219	.0000801	.0002599	.0007553
53		.0000001	.0000004	.0000022	.0000099	.0000382	.0001310	.0004015
54			.0000001	.0000005	.0000024	.0000107	.0000433	.0001676
55			.0000001	.0000004	.0000018	.0000080	.0000306	.0001244
56				.0000001	.0000008	.0000035	.0000142	.0000511
57				.0000001	.0000003	.0000015	.0000064	.0000243
58					.0000001	.0000006	.0000028	.0000112
59						.0000003	.0000012	.0000051
60						.0000001	.0000005	.0000028
61							.0000002	.0000009
62							.0000001	.0000004
63								.0000002
64								.0000001

x	.25	.26	.27	.28	.29	.30	.31	.32
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
14	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
15	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
16	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
17	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
18	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
19	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
20	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
21	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
22	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
23	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
24	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
25	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
26	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
27	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
28	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
29	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
30	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
31	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
32	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
33	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
34	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
35	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
36	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
37	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
38	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
39	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
40	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
41	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
42	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
43	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
44	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
45	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
46	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
47	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
48	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
49	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
50	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
51	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
52	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
53	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
54	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
55	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
56	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
57	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
58	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
59	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
60	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
61	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
62	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
63	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
64	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
65	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
66	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
67	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
68	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
69	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
70	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
71	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
72	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
73	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
74	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
75	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
76	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
77	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
78	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
79	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
80	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
81	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
82	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
83	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
84	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
85	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
86	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
87	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
88	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
89	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
90	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
91	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
92	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
93	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
94	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
95	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
96	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
97	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
98	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
99	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
100	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999

$$F_{\alpha, \beta, \gamma, \delta}(p) = \sum_{i=0}^{\infty} \frac{(i!)^{\alpha}}{i!} v^{\beta} (1-p)^{\gamma+i}$$

α	.25	.26	.27	.28	.29	.30	.31	.32
37	.4553717	.5650030	.6661816	.7586554	.8327985	.8897352	.9308030	.9586620
38	.3808574	.4893701	.5969111	.6960908	.7814800	.8503008	.9033498	.9393468
39	.3109185	.4145436	.5226660	.6275808	.7224881	.8007115	.8643534	.9137719
40	.2475850	.3430661	.4480699	.5551670	.6569350	.7472784	.8233986	.8860388
41	.1921120	.2771847	.3756258	.4812446	.5866822	.6849162	.7714847	.8455564
42	.1450333	.2164404	.3076595	.4083239	.5139554	.6171217	.7114847	.7933840
43	.1069119	.1678403	.2460110	.3387791	.4409866	.5456684	.6463988	.7366164
44	.0766112	.1256607	.1919237	.2746284	.3703465	.4734314	.5770878	.6744308
45	.0534266	.0916425	.1460034	.2173569	.3041157	.4021704	.5054898	.6078359
46	.0362588	.0650617	.1082607	.1678656	.2440002	.3343027	.4340470	.5370063
47	.0239325	.0449972	.0788172	.1264438	.1911552	.2717043	.3650070	.4638693
48	.0153695	.0302632	.0530475	.0888554	.1461491	.2157693	.3003185	.3960880
49	.0096013	.0196359	.0377297	.0664591	.1090005	.1671181	.2415757	.3366330
50	.0058343	.0116444	.0251808	.0463477	.0792731	.1266394	.1898748	.2664559
51	.0034486	.0078436	.0163621	.0314876	.0568030	.0935153	.1487417	.2137888
52	.0019828	.0047347	.0103503	.0208363	.0388351	.0673300	.1091961	.1642809
53	.0011090	.0027811	.0063737	.0134281	.0261479	.0472948	.0798313	.1233104
54	.0006034	.0015896	.0038205	.0084272	.0171525	.0323750	.0569304	.0916761
55	.0003104	.0008641	.0022392	.0051499	.0109409	.0215996	.0395919	.0677968
56	.0001645	.0004785	.0012661	.0030643	.0068225	.0140429	.0266450	.0478473
57	.0000824	.0002531	.0006999	.0017753	.0041362	.0088958	.0177434	.0349684
58	.0000402	.0001293	.0003766	.0009104	.0024482	.0054308	.0114304	.0221337
59	.0000191	.0000645	.0001973	.0005520	.0014043	.0033009	.0071759	.0144899
60	.0000088	.0000313	.0001006	.0002941	.0007864	.0019332	.0043898	.0092468
61	.0000040	.0000148	.0000499	.0001531	.0004288	.0011028	.0026165	.0057513
62	.0000017	.0000068	.0000241	.0000776	.0002277	.0006128	.0015194	.0034869
63	.0000007	.0000030	.0000113	.0000383	.0001178	.0003316	.0008595	.0020898
64	.0000003	.0000013	.0000053	.0000184	.0000593	.0001748	.0004737	.0011851
65	.0000001	.0000006	.0000023	.0000086	.0000291	.0000897	.0002843	.0006645
66		.0000002	.0000010	.0000039	.0000139	.0000449	.0001329	.0003630
67		.0000001	.0000004	.0000017	.0000065	.0000218	.0000677	.0001939
68			.0000002	.0000008	.0000029	.0000104	.0000336	.0001001
69			.0000001	.0000003	.0000013	.0000048	.0000168	.0000506
70				.0000001	.0000006	.0000021	.0000076	.0000249
71				.0000001	.0000002	.0000009	.0000035	.0000119
72					.0000001	.0000004	.0000016	.0000056
73						.0000004	.0000017	.0000068
74						.0000001	.0000003	.0000011
75							.0000001	.0000006
76								.0000002
77								.0000001

α	.33	.34	.35	.36	.37	.38	.39	.40
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
14	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
15	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
16	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
17	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
18	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
19	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
20	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
21	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
22	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
23	.99999998	.99999996	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
24	.99999998	.99999990	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
25	.99999998	.99999973	.99999992	.99999997	.99999999	1.00000000	1.00000000	1.00000000
26	.99999979	.99999931	.99999978	.99999993	.99999998	.99999999	1.00000000	1.00000000
27	.99999953	.99999833	.99999967	.99999981	.99999994	.99999998	1.00000000	1.00000000
28	.99999928	.99999612	.99999963	.99999953	.99999985	.99999995	.99999999	1.00000000
29	.99999777	.99999135	.99999967	.99999937	.99999948	.99999988	.99999996	.99999999
30	.99999544	.99998153	.99999286	.99999737	.99999908	.99999969	.99999990	.99999997
31	.99991050	.99986214	.99980474	.9999414	.9999786	.9999925	.9999978	.9999998
32	.99971086	.99963541	.99956867	.9998747	.9999528	.9999827	.9999940	.9999988
33	.99942234	.99935838	.9993811	.9997421	.9998976	.9999613	.9999861	.9999988
34	.99946079	.99974175	.9998226	.9998480	.9997886	.9999169	.9999768	.9999989
35	.99988845	.99954528	.99978408	.9999241	.9998601	.9999280	.9999389	.9999751
36	.9851208	.9922712	.9961794	.9993023	.9991948	.9996567	.9998607	.9999468
37	.9765255	.9873081	.9927490	.9963599	.9979671	.9983941	.9988128	.9991374
38	.9641682	.9798476	.9892131	.9945047	.9973354	.9987103	.9993298	.9997748
39	.9470301	.9690243	.9827580	.9906649	.9953933	.9977690	.9988300	.9995610
40	.9240974	.9538699	.9733108	.9853002	.9922932	.9961543	.9981736	.9991747
41	.8944246	.9333777	.9599576	.9770836	.9878140	.9935243	.9968035	.9984986
42	.8578484	.8965333	.9302976	.9527560	.9696871	.9833941	.9918378	.9961808
43	.8156011	.8727682	.9176348	.9491875	.9701339	.9834897	.9910978	.9954860
44	.7603014	.8314277	.8868725	.9276086	.9558533	.9741546	.9858139	.9938301
45	.7011716	.7825424	.8488498	.8997461	.9365939	.9617639	.9780397	.9880668
46	.6364524	.7285793	.8033526	.8649179	.914581	.9446425	.9670427	.9813888
47	.5678484	.6645333	.7502976	.8227560	.8796871	.9233941	.9518378	.9713748
48	.4973925	.5978699	.6943066	.7733002	.8407808	.8938129	.9317768	.9583939
49	.4272653	.5285056	.6270159	.7170907	.7946053	.8574679	.9058853	.9403171
50	.3595945	.4584807	.5590619	.6551420	.7414742	.8145421	.8780608	.9247981
51	.2962668	.3899412	.4895398	.5869344	.6821867	.7645843	.8331388	.8899973

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 144

	.33	.34	.35	.36	.37	.38	.39	.40
52	.2387770	.3248633	.4205420	.5202927	.6180092	.7080849	.7863163	.8564018
53	.1881352	.2649051	.3540958	.4512385	.5500292	.6446787	.7303859	.8022533
54	.1441300	.2118920	.2919824	.3838129	.4808773	.5773107	.6683159	.7490883
55	.1000000	.1647435	.2356333	.3119891	.4008685	.5000000	.6083159	.7222533
56	.0729360	.1255067	.1859775	.2610693	.3484974	.4443938	.5444028	.6376036
57	.0526631	.0933327	.1434833	.2084771	.2874863	.3774439	.4743586	.5701178
58	.0400284	.0678338	.1081574	.1628049	.2321669	.3147566	.4071936	.5043131
59	.0272849	.0480915	.0796250	.1248689	.1853431	.2569401	.3367828	.4300090
60	.0161403	.0332670	.0572306	.0926737	.1417137	.2053166	.2803758	.3714110
61	.0117594	.0224481	.0401477	.0674945	.1070027	.1604757	.2263920	.3094809
62	.0074316	.0147733	.0274809	.0479917	.0789308	.1206300	.1805263	.2558041
63	.0045780	.0094805	.0183502	.0333036	.0568593	.0915776	.1355583	.2013249
64	.0027486	.0053915	.0105711	.0202661	.0375448	.0660057	.1084468	.1677799
65	.0016083	.0036177	.0073898	.0145966	.0274448	.0475900	.0770800	.1206169
66	.0009170	.0021506	.0046996	.0095992	.0183819	.0333098	.0561787	.0901241
67	.0005094	.0012460	.0028368	.0060311	.0120024	.0224807	.0395407	.0635791
68	.0002757	.0007035	.0016491	.0036543	.0076524	.0148729	.0271968	.0469066
69	.0001434	.0003970	.0009271	.0020261	.0042543	.0086057	.0162440	.0293679
70	.0000747	.0002074	.0005340	.0012842	.0028805	.0060519	.0119411	.0221619
71	.0000374	.0001083	.0002912	.0007285	.0017010	.0037173	.0076236	.0147044
72	.0000182	.0000551	.0001545	.0004027	.0009790	.0022241	.0047486	.0095088
73	.0000086	.0000273	.0000798	.0002168	.0005491	.0012993	.0028804	.0060570
74	.0000040	.0000132	.0000402	.0001138	.0003001	.0007391	.0017043	.0036479
75	.0000018	.0000062	.0000197	.0000582	.0001598	.0004097	.0009828	.0023108
76	.0000008	.0000028	.0000094	.0000290	.0000839	.0002213	.0005523	.0013918
77	.0000003	.0000013	.0000044	.0000140	.0000419	.0001164	.0003023	.0007358
78	.0000001	.0000005	.0000020	.0000066	.0000206	.0000596	.0001612	.0004061
79	.0000001	.0000002	.0000009	.0000030	.0000092	.0000278	.0000838	.0002105
80	.0000001	.0000001	.0000004	.0000014	.0000046	.0000145	.0000424	.0001161
81		.0000003	.0000006	.0000021	.0000068	.0000209	.0000609	.0001636
82		.0000001	.0000003	.0000009	.0000031	.0000093	.0000278	.0000807
83			.0000001	.0000004	.0000014	.0000047	.0000145	.0000424
84				.0000002	.0000006	.0000021	.0000068	.0000209
85					.0000001	.0000004	.0000014	.0000047
86						.0000001	.0000004	.0000014
87							.0000001	.0000004
88								.0000001
89								

	.41	.42	.43	.44	.45	.46	.47	.48
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
14	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
15	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
16	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
17	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
18	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
19	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
20	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
21	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
22	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
23	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
24	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
25	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
26	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
27	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
28	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
29	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
30	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
31	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
32	.99999999	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
33	.99999999	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
34	.99999999	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
35	.99999999	.99999999	.99999999	.99999999	.99999999	1.00000000	1.00000000	1.00000000
36	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	1.00000000	1.00000000
37	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	1.00000000
38	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
39	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
40	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
41	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
42	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
43	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
44	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
45	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
46	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
47	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
48	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
49	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
50	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
51	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
52	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
53	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
54	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999
55	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999	.99999999

$$P(n, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 144

x	.41	.42	.43	.44	.45	.46	.47	.48
36	.7845116	.7993461	.8102474	.8170243	.8209948	.8221190	.8204680	.8162888
37	.6649430	.6781449	.6870030	.6925439	.6958982	.6969888	.6958108	.6924889
38	.5610348	.5721306	.5796711	.5837378	.5854288	.5848350	.5820844	.5772490
39	.4844187	.4933439	.4981077	.4998514	.4986436	.4945437	.4877419	.4783370
40	.4269413	.4339430	.4386396	.4408078	.4394816	.4348333	.4272381	.4168073
41	.3805133	.3865517	.3902414	.3916336	.3908438	.3871316	.3806043	.3712831
42	.3382443	.3439901	.3486031	.3511373	.3516447	.3491831	.3438647	.3357418
43	.2978076	.3030930	.3076876	.3105087	.3116288	.3101316	.3060888	.3004940
44	.2643189	.2695671	.2739851	.2766275	.2775035	.2757592	.2717581	.2656740
45	.2373754	.2427442	.2465589	.2488849	.2496142	.2478681	.2439603	.2379431
46	.2170401	.2225140	.2262663	.2285715	.2293281	.2285350	.2261446	.2221689
47	.2035706	.2091360	.2128533	.2150202	.2157871	.2149330	.2125810	.2086474
48	.1964973	.2021814	.2058937	.2080396	.2087120	.2078288	.2054337	.2015496
49	.19581920	.2015348	.2052474	.2073918	.2079685	.2070219	.2045815	.2007418
50	.2008846	.20664733	.2103426	.2119380	.2115973	.2091888	.2053013	.2005087
51	.2067482	.21259601	.2162831	.2178815	.2175006	.2150466	.2101885	.2044138
52	.2139489	.2198975	.2235836	.2251891	.2247846	.2222888	.2173888	.2116101
53	.2221730	.2282289	.2319158	.2335270	.2331057	.2305688	.2256196	.2198479
54	.2310563	.2372270	.2409105	.2425279	.2420817	.2394915	.2345013	.2287815
55	.2404749	.2467314	.2504181	.2520314	.2515730	.2489338	.2439035	.2382444
56	.2503385	.2566870	.2603709	.2620031	.2615304	.2588489	.2537798	.2480738
57	.2606790	.2670389	.2707289	.2723753	.2718927	.2691688	.2640518	.2583533
58	.2714988	.2778788	.2815724	.2832219	.2827345	.2799666	.2747986	.2690787
59	.2828444	.2892444	.2929473	.2945978	.2941003	.2912988	.2860917	.2803517
60	.2947280	.3011483	.3048525	.3065043	.3059351	.3030936	.2978332	.2920418
61	.3071588	.3135981	.3173088	.3189633	.3183658	.3154883	.3101887	.3043984
62	.3201384	.3265984	.3303148	.3319736	.3313736	.3284688	.3231341	.3173084
63	.3336787	.3401587	.3438836	.3455486	.3449486	.3419988	.3366341	.3307784
64	.3477885	.3542885	.3580187	.3596836	.3590836	.3561088	.3507141	.3448384
65	.3624789	.3689989	.3727387	.3744036	.3738036	.3708088	.3653941	.3595184
66	.3777493	.3842893	.3880387	.3897036	.3891036	.3861088	.3806941	.3748184
67	.3935997	.3999997	.4037487	.4054136	.4048136	.4018188	.3964041	.3905284
68	.4099497	.4163497	.4201087	.4217736	.4211736	.4181788	.4127641	.4068884
69	.4267997	.4331997	.4369587	.4386236	.4380236	.4350288	.4296141	.4237384
70	.4441497	.4505497	.4543087	.4560736	.4554736	.4524788	.4470641	.4411884
71	.4619997	.4683997	.4721587	.4739236	.4733236	.4703288	.4649141	.4590384
72	.4803497	.4867497	.4905087	.4922736	.4916736	.4886788	.4832641	.4773884
73	.4991997	.5055997	.5093587	.5111236	.5105236	.5075288	.5021141	.4962384
74	.5185497	.5249497	.5287087	.5304736	.5298736	.5268788	.5214641	.5155884
75	.5383997	.5447997	.5485587	.5503236	.5497236	.5467288	.5413141	.5354384
76	.5587497	.5651497	.5689087	.5706736	.5700736	.5670788	.5616641	.5557884
77	.5795997	.5859997	.5897587	.5915236	.5909236	.5879288	.5825141	.5766384
78	.5999497	.6063497	.6101087	.6118736	.6112736	.6082788	.6028641	.6000000
79	.6197997	.6261997	.6299587	.6317236	.6311236	.6281288	.6227141	.6168384
80	.6396497	.6460497	.6498087	.6515736	.6509736	.6479788	.6425641	.6366884
81	.6594997	.6658997	.6696587	.6714236	.6708236	.6678288	.6624141	.6565384
82	.6793497	.6857497	.6895087	.6912736	.6906736	.6876788	.6822641	.6763884
83	.6991997	.7055997	.7093587	.7111236	.7105236	.7075288	.7021141	.6962384
84	.7185497	.7249497	.7287087	.7304736	.7298736	.7268788	.7214641	.7155884
85	.7383997	.7447997	.7485587	.7503236	.7497236	.7467288	.7413141	.7354384
86	.7587497	.7651497	.7689087	.7706736	.7700736	.7670788	.7616641	.7557884
87	.7795997	.7859997	.7897587	.7915236	.7909236	.7879288	.7825141	.7766384
88	.7999497	.8063497	.8101087	.8118736	.8112736	.8082788	.8028641	.7969884
89	.8197997	.8261997	.8299587	.8317236	.8311236	.8281288	.8227141	.8168384
90	.8396497	.8460497	.8498087	.8515736	.8509736	.8479788	.8425641	.8366884
91	.8594997	.8658997	.8696587	.8714236	.8708236	.8678288	.8624141	.8565384
92	.8793497	.8857497	.8895087	.8912736	.8906736	.8876788	.8822641	.8763884
93	.8991997	.9055997	.9093587	.9111236	.9105236	.9075288	.9021141	.8962384
94	.9185497	.9249497	.9287087	.9304736	.9298736	.9268788	.9214641	.9155884
95	.9383997	.9447997	.9485587	.9503236	.9497236	.9467288	.9413141	.9354384
96	.9587497	.9651497	.9689087	.9706736	.9700736	.9670788	.9616641	.9557884
97	.9795997	.9859997	.9897587	.9915236	.9909236	.9879288	.9825141	.9766384
98	.9999497	.9999997	.9999587	.9999236	.9999236	.9999288	.9999141	.9999000
99	.9999997	.9999997	.9999997	.9999997	.9999997	.9999997	.9999997	.9999997
100	.9999997	.9999997	.9999997	.9999997	.9999997	.9999997	.9999997	.9999997
101	.9999997	.9999997	.9999997	.9999997	.9999997	.9999997	.9999997	.9999997

x	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
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37	1.0000000	1.0000000
38	1.0000000	1.0000000
39	1.0000000	1.0000000
40	1.0000000	1.0000000
41	.9999999	1.0000000
42	.9999999	.9999999
43	.9999999	.9999999
44	.9999999	.9999999
45	.9999999	.9999999
46	.9999999	.9999999
47	.9999999	.9999999

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 144

	.49	.50
48	.9999486	.9999818
49	.9998973	.9999610
50	.9998006	.9999214
51	.9996545	.9998461
52	.9993182	.9997075
53	.9987138	.9994594
54	.9978610	.9990287
55	.9964384	.9983031
56	.9941346	.9971136
57	.9926770	.9958204
58	.9908164	.9943147
59	.9879339	.9915443
60	.9846782	.9881579
61	.9815007	.9854491
62	.9784731	.9821185
63	.9746331	.9784835
64	.9704770	.9746301
65	.9638050	.9704237
66	.9500440	.9606927
67	.9303695	.9433178
68	.8947870	.9173145
69	.8341093	.8700894
70	.8698773	.8614651
71	.5037635	.5986533
72	.4375624	.5331875
73	.3730720	.4668185
74	.3119895	.4013467
75	.2556239	.3365349
76	.2051060	.2799106
77	.1610397	.2266838
78	.1236301	.1796823
79	.0927929	.1393073
80	.0680244	.1055763
81	.0486691	.0781699
82	.0340110	.0555185
83	.0231768	.0384765
84	.0154001	.0264509
85	.0099746	.0184861
86	.0062951	.0120833
87	.0038697	.0076883
88	.0021152	.0047716
89	.0011424	.0026844
90	.0006500	.0016969
91	.0004216	.0009713
92	.0002861	.0005406
93	.0001779	.0003226
94	.0000937	.0001939
95	.0000594	.0001266
96	.0000340	.0000790
97	.0000263	.0000518
98	.0000189	.0000388
99	.0000133	.0000240
100	.0000095	.0000177
101	.0000063	.0000107
102	.0000041	.0000073
103		.0000051

AMCP 706-109

$$P(r, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 145

N	.01	.02	.03	.04	.05	.06	.07	.08
1	.97471385	.9465703	.9679246	.9973126	.9994113	.9996731	.9999731	.9999944
2	.4860714	.7884429	.9327720	.9810744	.9949183	.9984984	.9996793	.9999236
3	.1780248	.5661414	.8191849	.9323876	.9778651	.9938927	.9980873	.9994668
4	.0588949	.3501410	.6354121	.8552667	.9511774	.9763745	.9883732	.9971377
5	.0157691	.1664071	.4408886	.6485307	.8553664	.9396340	.9771156	.9919736
6	.0035708	.0721762	.2699963	.5243929	.7369150	.8726581	.9447162	.9780697
7	.0006950	.0087304	.0471483	.2609256	.5214459	.7728769	.8878153	.9498567
8	.0001184	.0011801	.0071702	.0254752	.0734424	.1646065	.0327892	.0911467
9	.0000179	.0002185	.0014520	.0064650	.0213857	.0571548	.0923443	.0160784
10	.0000004	.0002298	.0015023	.0066864	.0208013	.0571850	.0923867	.0161368
11	.0000003	.0001779	.0004531	.0116461	.0343997	.0833584	.1617380	.2949188
12	.0000000	.0000396	.0015064	.0140030	.0605172	.1683700	.3167380	.4949188
13	.0000000	.0000081	.0004166	.0053908	.0304678	.0956101	.2161858	.3743884
14	.0000000	.0000013	.0001309	.0014287	.0062373	.0239840	.0833584	.2161858
15	.0000000	.0000003	.0000345	.0007544	.0023579	.0088103	.0316116	.1044905
16			.0000085	.0002478	.0008672	.0138480	.0474910	.1188169
17			.0000020	.0000763	.0002869	.0009916	.0036088	.0115118
18			.0000004	.0000021	.0000386	.0001825	.0007859	.0029436
19			.0000001	.0000006	.0000016	.0000097	.0000465	.0002178
20				.0000004	.0000013	.0000064	.0000245	.0000903
21				.0000001	.0000003	.0000019	.0000077	.0000271
22					.0000003	.0000012	.0000057	.0000211
23					.0000001	.0000009	.0000044	.0000173
24						.0000006	.0000032	.0000114
25						.0000001	.0000019	.0000086
26						.0000000	.0000006	.0000042
27						.0000000	.0000002	.0000017
28							.0000000	.0000001
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145								.0000000

-543-

$$F(n, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 145

x	.25	.26	.27	.28	.29	.30	.31	.32
37	.4745178	.5841776	.6860058	.7740880	.8452812	.8991923	.9375292	.9631818
38	.3994860	.5090347	.6161542	.7136089	.7963623	.8621307	.9111699	.9455474
39	.3284032	.4379986	.5427280	.6467636	.7395744	.8169083	.8775121	.9219621
40	.2633959	.3618666	.4682162	.5754429	.6759367	.7639083	.8360226	.8915111
41	.2039727	.2943195	.3951657	.5019429	.6070555	.7036249	.7866303	.8535369
42	.1569530	.2337206	.3260104	.4287417	.5350036	.6374601	.7297268	.8077717
43	.1164923	.1809987	.2626561	.3583516	.4621302	.5672444	.6665729	.7544431
44	.0841864	.1366274	.2065273	.2925884	.3908321	.4951625	.5985317	.6943298
45	.0592228	.1004872	.1584019	.2333921	.3233227	.4235487	.5276666	.6287517
46	.0405463	.0719875	.1184513	.1817231	.2614337	.3546630	.4562081	.5594875
47	.0270126	.0502191	.0863289	.1360417	.2064802	.2990438	.3864156	.4886290
48	.0175102	.0341098	.0613033	.1022600	.1592008	.2325469	.3203678	.4183913
49	.0110433	.0225522	.0424055	.0738301	.1197736	.1818522	.2597841	.3509080
50	.0067761	.0145142	.02855690	.05179789	.0878941	.1388430	.2059020	.2880424
51	.0040450	.0090919	.0187431	.0356485	.0628233	.1031525	.1594229	.2312415
52	.0023493	.0055430	.0119735	.0238187	.0438718	.0751996	.1205358	.1814506
53	.0013275	.0032890	.0074474	.0155024	.0298272	.0533114	.0889344	.1390946
54	.0007298	.0018994	.0045099	.0098275	.0197612	.0368510	.0640297	.1041191
55	.0003904	.0010676	.0026588	.0060676	.0127565	.0248323	.0449669	.0760778
56	.0002032	.0005840	.0015261	.0036483	.0080227	.0163099	.0307966	.0542445
57	.0001029	.0003109	.0008528	.0021363	.0049152	.0104399	.0205549	.0377320
58	.0000507	.0001511	.0004639	.0012181	.0029334	.0065118	.0133874	.0255989
59	.0000243	.0000813	.0002457	.0006764	.0017053	.0039577	.0084948	.0169360
60	.0000114	.0000399	.0001267	.0003657	.0009656	.0023435	.0052535	.0109246
61	.0000052	.0000191	.0000636	.0001926	.0005325	.0013520	.0031662	.0068698
62	.0000023	.0000087	.0000311	.0000987	.0002860	.0007598	.0018595	.0042110
63	.0000010	.0000040	.0000148	.0000493	.0001496	.0004160	.0010641	.0025158
64	.0000004	.0000018	.0000069	.0000240	.0000762	.0002218	.0005933	.0014648
65	.0000002	.0000008	.0000031	.0000113	.0000378	.0001152	.0003223	.0008311
66	.0000001	.0000003	.0000014	.0000052	.0000183	.0000583	.0001706	.0004595
67	.0000001	.0000001	.0000006	.0000023	.0000076	.0000287	.0000879	.0002475
68	.0000001	.0000001	.0000002	.0000010	.0000039	.0000138	.0000442	.0001299
69	.0000001	.0000001	.0000001	.0000004	.0000018	.0000069	.0000216	.0000664
70	.0000001	.0000001	.0000001	.0000002	.0000008	.0000029	.0000103	.0000331
71	.0000001	.0000001	.0000001	.0000001	.0000003	.0000013	.0000048	.0000161
72	.0000001	.0000001	.0000001	.0000001	.0000001	.0000006	.0000028	.0000076
73	.0000001	.0000001	.0000001	.0000001	.0000001	.0000002	.0000010	.0000035
74	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000004	.0000016
75	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000002	.0000007
76	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000003
77	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001

	.33	.34	.35	.36	.37	.38	.39	.40
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
14	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
15	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
16	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
17	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
18	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
19	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
20	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
21	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
22	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
23	.99999991	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
24	.99999975	.99999993	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
25	.99999934	.99999979	.99999993	.99999998	.99999999	1.00000000	1.00000000	1.00000000
26	.99999839	.99999946	.99999982	.99999995	.99999998	1.00000000	1.00000000	1.00000000
27	.99999662	.99999865	.99999952	.99999986	.99999996	1.00000000	1.00000000	1.00000000
28	.99999144	.99999737	.99999890	.99999963	.99999988	.99999994	.99999999	1.00000000
29	.99998251	.99999297	.99999743	.99999911	.99999970	.99999991	.99999997	.99999999
30	.99996816	.99998487	.99999424	.99999791	.99999928	.99999976	.99999993	.99999998
31	.99993501	.99996873	.99998759	.99999530	.99999831	.99999942	.99999981	.99999994
32	.99987314	.99993740	.99997307	.99998930	.99999620	.99999846	.99999954	.99999977
33	.99973805	.99988130	.99994881	.99997898	.99999176	.99999694	.99999892	.99999963
34	.99957170	.99978147	.99990181	.99995801	.99998291	.99999337	.99999756	.99999914
35	.99931138	.99961206	.99981843	.99991914	.99996573	.99998617	.99999469	.99999806
36	.99870280	.99933529	.99947609	.99949881	.99953374	.99972118	.99988888	.99995111
37	.99791620	.99899962	.99944187	.99973065	.99987632	.99945964	.99977753	.99999777
38	.99682461	.99830845	.99970732	.99953320	.99977699	.99988663	.9995616	.99981566
39	.99526856	.99727048	.99950173	.99921752	.99961119	.99981618	.99917333	.99964633
40	.9316583	.9590224	.9766173	.9873035	.9934403	.9967755	.9984920	.99939292
41	.9032133	.9403447	.96465312	.98000416	.98928823	.9945237	.9973379	.99876900
42	.8695947	.9157034	.9481085	.9695804	.9830285	.9909892	.9954481	.9978182
43	.8213732	.8842706	.9260643	.9550025	.9739337	.9856251	.9948563	.9983337
44	.7775603	.8438438	.8976393	.9353770	.9611392	.9777499	.9878748	.9937185
45	.7206045	.7991634	.86421577	.9097766	.9437199	.9685608	.9810838	.9898013
46	.6570077	.7456600	.8192876	.8774560	.9207584	.9511666	.9713393	.9839854
47	.5904077	.6856290	.7690813	.8379337	.8914424	.9306601	.9577937	.9755338
48	.5206429	.6205462	.7121495	.7911059	.8551761	.9041835	.9395363	.9636703
49	.4504073	.5520953	.6495610	.7373272	.8116908	.8710528	.9187481	.9475198
50	.3819259	.4822092	.5828458	.6774436	.7611387	.8308539	.8856184	.9288057
51	.3171650	.4133946	.5130785	.6127692	.7042130	.7833497	.8486888	.9009888

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 145

	.33	.34	.35	.36	.37	.38	.39	.40
52	.2377437	.3469898	.4446912	.5450037	.6417549	.7295433	.8045745	.8650438
53	.2048470	.2852909	.3773520	.4760980	.5755411	.6697074	.7536623	.8242144
54	.1812261	.2595185	.3437227	.4300861	.5073047	.5853566	.6625455	.7364516
55	.1207599	.1805669	.2553582	.3429081	.4390281	.5301591	.6343309	.7222026
56	.0894943	.1388472	.2033571	.2822480	.3726825	.4700167	.5685188	.6623643
57	.0647452	.1043049	.1583562	.2274103	.3100605	.4028949	.5008956	.5982517
58	.0457119	.0765205	.1208215	.1792469	.2526351	.3386600	.4333892	.5315148
59	.0314683	.0548039	.0896114	.1361419	.2014646	.2749266	.3679053	.4640107
60	.0211580	.0383073	.0650687	.1040474	.1571499	.2249411	.3061695	.3976507
61	.0138651	.0261265	.0461267	.0765587	.1198458	.1775152	.2495953	.3342401
62	.0088598	.0173827	.0319143	.0550127	.0893172	.1370114	.1991939	.2753341
63	.0055197	.0112800	.0215460	.0385926	.0650257	.1033775	.1555358	.2221886
64	.0033523	.0071382	.0141906	.0264242	.0462301	.0762191	.1187621	.1753979
65	.0019846	.0044044	.0091161	.0176543	.0320869	.0540920	.0866386	.1354821
66	.0011451	.0026494	.0057111	.0115070	.0217359	.0386030	.0646386	.1023212
67	.0006439	.0015536	.0034880	.0073156	.0143672	.0265016	.0450394	.0755246
68	.0003528	.0008879	.0020778	.0045357	.0092645	.0177583	.0320184	.0544696
69	.0001884	.0004846	.0012063	.0027421	.0058269	.0116080	.0217358	.0383520
70	.0000980	.0002685	.0006826	.0016161	.0035740	.0074028	.0143995	.0263692
71	.0000497	.0001420	.0003764	.0009285	.0021374	.0046045	.0093071	.0176954
72	.0000245	.0000732	.0002023	.0005200	.0012462	.0027927	.0058678	.0115871
73	.0000118	.0000367	.0001059	.0002838	.0007082	.0016515	.0036079	.0074017
74	.0000055	.0000180	.0000540	.0001509	.0003923	.0009520	.0021630	.0046115
75	.0000025	.0000086	.0000269	.0000782	.0002117	.0005349	.0012642	.0028017
76	.0000011	.0000040	.0000130	.0000395	.0001113	.0002929	.0007202	.0016594
77	.0000005	.0000018	.0000061	.0000194	.0000570	.0001562	.0003998	.0009581
78	.0000002	.0000008	.0000028	.0000093	.0000285	.0000812	.0002163	.0005391
79	.0000001	.0000003	.0000013	.0000043	.0000138	.0000411	.0001140	.0002955
80		.0000001	.0000005	.0000020	.0000065	.0000203	.0000585	.0001578
81		.0000001	.0000002	.0000009	.0000030	.0000097	.0000292	.0000821
82			.0000001	.0000004	.0000014	.0000045	.0000142	.0000416
83				.0000002	.0000006	.0000021	.0000067	.0000205
84				.0000001	.0000003	.0000009	.0000031	.0000099
85					.0000001	.0000004	.0000014	.0000046
86						.0000002	.0000006	.0000021
87						.0000001	.0000003	.0000009
88							.0000001	.0000004
89								.0000002
90								.0000001

	.41	.42	.43	.44	.45	.46	.47	.48
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
14	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
15	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
16	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
17	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
18	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
19	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
20	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
21	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
22	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
23	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
24	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
25	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
26	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
27	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
28	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
29	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
30	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
31	.9999998	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
32	.9999999	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
33	.9999998	.9999996	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
34	.9999997	.9999991	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
35	.9999993	.9999978	.9999993	.9999998	.9999999	1.0000000	1.0000000	1.0000000
36	.9999987	.9999947	.9999983	.9999995	.9999998	1.0000000	1.0000000	1.0000000
37	.9999966	.9999930	.9999987	.9999996	.9999999	1.0000000	1.0000000	1.0000000
38	.9999929	.9999917	.9999990	.9999996	.9999997	.9999999	1.0000000	1.0000000
39	.9999856	.9999443	.9999775	.9999928	.9999976	.9999993	.9999998	.9999999
40	.99997162	.9998858	.9999564	.9999841	.9999945	.9999982	.9999994	.9999998
41	.99994587	.99997137	.9999100	.9999660	.9999878	.9999959	.9999987	.9999996
42	.9999003	.9999305	.9999206	.9999316	.9999738	.9999929	.9999969	.9999990
43	.99982116	.9999125	.9999435	.9999587	.9999453	.9999799	.9999930	.9999977
44	.9998087	.9998454	.9999315	.9999725	.9999895	.9999957	.9999964	.9999988
45	.9997837	.99974591	.9998824	.99994822	.99997836	.9999912	.9999967	.9999985
46	.99974850	.9996935	.99979292	.99990536	.99995892	.99998307	.99999338	.99999755
47	.99965017	.9996141	.9996406	.99983216	.99992434	.9999768	.9999865	.9999944
48	.99959074	.99956747	.99961325	.99971100	.9998475	.9999390	.99997465	.9999986
49	.99950583	.99948059	.99958434	.9996664	.99976521	.99989168	.99995257	.99999030
50	.99940215	.99934220	.9994836	.99961434	.99960368	.99981037	.99991380	.99996283
51	.99936263	.9993000	.9994203	.9995830	.99955071	.99967738	.99984779	.99993186
52	.99931038	.99924077	.99935113	.99950004	.9994470	.99956636	.9997387	.9998452
53	.99926015	.99919049	.99928223	.99941281	.999379	.99944141	.99956395	.9997897
54	.99921065	.99914099	.99919415	.99932580	.99927415	.99935569	.99949196	.99964586

AMCP 706-109

$$S = \sum_{i=1}^n \frac{1}{i^2} \approx 1.644934$$

1.644934

	.41	.42	.43	.44	.45	.46	.47	.48
55	.79986582	.8594171	.9066312	.9408618	.9643161	.9798077	.9888108	.9941984
56	.7466256	.8179887	.8750396	.9181168	.9468494	.9655722	.9767807	.9827389
57	.6893661	.7697746	.8367381	.8893953	.9285117	.9559702	.9741876	.9836118
58	.6372372	.7152604	.7791628	.8341594	.8825300	.9238783	.9588891	.9782205
59	.5817313	.6551663	.7199839	.7741539	.8202760	.8614485	.8982799	.9318697
60	.4946070	.5541110	.6025417	.643066	.6773448	.7071330	.734457	.7597807
61	.4277482	.4820301	.5244370	.5647780	.6027308	.6392001	.6747168	.7095139
62	.3630072	.4180488	.4651372	.5046708	.5460303	.5892066	.6342906	.6799731
63	.3020536	.3583341	.4060642	.4455223	.4860035	.5282066	.5722318	.6172772
64	.2446921	.3026408	.3520802	.3934611	.4362244	.4806094	.5265363	.5735351
65	.1965432	.2571478	.3109741	.3579741	.4062081	.4556364	.5059381	.5567351
66	.1535366	.2189047	.2779093	.3292254	.3824556	.4369092	.4919857	.5471971
67	.1172943	.1779127	.2356087	.2900708	.3416082	.3992206	.4569081	.5139716
68	.0875982	.1335749	.1855053	.2337755	.2875960	.3469762	.4099261	.4755566
69	.0639271	.1008998	.1511544	.2052568	.2625382	.3220084	.3835781	.4462581
70	.0455706	.0744953	.1154618	.1700728	.2386574	.3194630	.4015664	.4841839
71	.0317210	.0537357	.0862131	.1313053	.1902666	.2620453	.3474405	.4401443
72	.0215545	.0378560	.0629833	.0991769	.1484473	.2117287	.2883071	.3757503
73	.0148933	.0269375	.0448388	.0731460	.1137273	.1668070	.2344115	.3146586
74	.0092475	.0174743	.0312069	.0527328	.0845056	.1266889	.1866773	.2592669
75	.0058358	.0114495	.0212011	.0371359	.0615947	.0970292	.1453793	.2076186
76	.0035914	.0073159	.0140585	.0255173	.0438581	.0714982	.1107400	.1633603
77	.0021544	.0042550	.0090901	.0171143	.0304482	.0514866	.0824836	.1257319
78	.0012603	.0027700	.0057341	.0112014	.0205657	.0361755	.0600135	.0946066
79	.0007184	.0016406	.0035267	.0071497	.0136917	.0248157	.0426414	.0695591
80	.0003990	.0009470	.0021244	.0044499	.0088419	.0166136	.0295769	.0499503
81	.0002159	.0005324	.0012355	.0026998	.0055470	.0108508	.0200184	.0350175
82	.0001138	.0002918	.0007034	.0018963	.0043160	.00964087	.0182164	.0319561
83	.0000584	.0001557	.0003901	.0009196	.0020417	.0042883	.0085086	.0159870
84	.0000292	.0000809	.0002107	.0005161	.0011910	.0025940	.0053397	.0104034
85	.0000142	.0000409	.0001108	.0002820	.0006760	.0015287	.0032655	.0065998
86	.0000087	.0000202	.0000567	.0001500	.0003737	.0008774	.0019455	.0040791
87	.0000043	.0000109	.0000283	.0000777	.0002011	.0004904	.0011288	.0024568
88	.0000024	.0000064	.0000187	.0000533	.0001403	.0003466	.0008377	.0018408
89	.0000014	.0000039	.0000112	.0000316	.0000837	.0002041	.0004956	.0011506
90	.0000008	.0000020	.0000056	.0000150	.0000373	.0000947	.0002317	.0005457
91	.0000004	.0000010	.0000028	.0000072	.0000180	.0000440	.0001076	.0002468
92	.0000002	.0000006	.0000016	.0000042	.0000105	.0000255	.0000619	.0001498
93	.0000001	.0000003	.0000008	.0000021	.0000052	.0000126	.0000312	.0000756
94								
95								
96				.0000001	.0000002	.0000007	.0000024	.0000075
97					.0000001	.0000003	.0000011	.0000034
98						.0000001	.0000005	.0000015
99						.0000001	.0000002	.0000008
100						.0000001	.0000001	.0000003
101								.0000001

	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	1.0000000	1.0000000
8	1.0000000	1.0000000
9	1.0000000	1.0000000
10	1.0000000	1.0000000
11	1.0000000	1.0000000
12	1.0000000	1.0000000
13	1.0000000	1.0000000
14	1.0000000	1.0000000
15	1.0000000	1.0000000
16	1.0000000	1.0000000
17	1.0000000	1.0000000
18	1.0000000	1.0000000
19	1.0000000	1.0000000
20	1.0000000	1.0000000
21	1.0000000	1.0000000
22	1.0000000	1.0000000
23	1.0000000	1.0000000
24	1.0000000	1.0000000
25	1.0000000	1.0000000
26	1.0000000	1.0000000
27	1.0000000	1.0000000
28	1.0000000	1.0000000
29	1.0000000	1.0000000
30	1.0000000	1.0000000
31	1.0000000	1.0000000
32	1.0000000	1.0000000
33	1.0000000	1.0000000
34	1.0000000	1.0000000
35	1.0000000	1.0000000
36	1.0000000	1.0000000
37	1.0000000	1.0000000
38	1.0000000	1.0000000
39	1.0000000	1.0000000
40	1.0000000	1.0000000
41	.9999999	1.0000000
42	.9999997	.9999999
43	.9999993	.9999995
44	.9999983	.9999985
45	.9999961	.9999968
46	.9999914	.9999971

$$f(x, y, z) = \sum_{i=0}^n \binom{n}{i} x^i y^{n-i} z^{n-i}$$

N	.49	.50
47	.9999815	.9999936
48	.9999616	.9999962
49	.9999225	.9999711
50	.9998481	.9999410
51	.9997108	.9998838
52	.9994652	.9997768
53	.9990106	.9995034
54	.9981124	.9992440
55	.9971422	.9986659
56	.9951708	.9977093
57	.9923811	.9961730
58	.9880461	.9937715
59	.9817268	.9901295
60	.9737739	.9847591
61	.9644447	.9770615
62	.9493884	.9667353
63	.9234519	.9518030
64	.8932545	.9326573
65	.8617743	.9081269
66	.8216890	.8775582
67	.7750062	.8405053
68	.7221208	.7968160
69	.6618371	.7467018
70	.6013465	.6907773
71	.5361603	.6300592
72	.4700019	.5659204
73	.4046723	.5000000
74	.3413047	.4340796
75	.2832284	.3699408
76	.2298598	.3092227
77	.1826322	.2532982
78	.1419710	.2031840
79	.1079129	.1594947
80	.0801609	.1224418
81	.0581614	.0918711
82	.0412033	.0673427
83	.0284853	.0481970
84	.0192104	.0336647
85	.0126331	.0229385
86	.0080980	.0152400
87	.0053581	.0098705
88	.0037774	.0063284
89	.0021231	.0038280
90	.0012513	.0022907
91	.0006840	.0013141
92	.0003220	.0007560
93	.0001709	.0004166
94	.0000882	.0002212
95	.0000442	.0001162
96	.0000215	.0000588
97	.0000102	.0000289
98	.0000047	.0000138
99	.0000021	.0000064
100	.0000009	.0000029
101	.0000004	.0000012
102	.0000002	.0000005
103	.0000001	.0000002
104		.0000001

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 146

	.01	.02	.03	.04	.05	.06	.07	.08
1	.7694640	.9476391	.9882869	.9974201	.9994407	.9998807	.9999780	.9999949
2	.4294821	.7916250	.9353966	.9817288	.9951429	.9987689	.9996999	.9999893
3	.1805053	.5607870	.8168028	.9343160	.9787434	.9936236	.9981987	.9995189
4	.0597892	.3346616	.6407453	.8594963	.9373132	.9770895	.9927751	.9977906
5	.0161973	.1696818	.4460841	.6902545	.8593589	.9418872	.9781609	.9924872
6	.0036922	.0740608	.2751033	.5311184	.7428377	.8766778	.9469840	.9791820
7	.0007238	.0280018	.1500350	.3574693	.5987194	.7788638	.8918022	.9581156
8	.0001241	.0094838	.0739660	.2308859	.4470159	.6539947	.8087359	.9030437
9	.0000189	.0028466	.0326595	.1323536	.3082871	.5155097	.7000953	.8339841
10	.0000026	.0007696	.0130700	.0692746	.1963305	.3799711	.5747142	.7390980
11	.0000003	.0001889	.0047709	.0332671	.1156039	.2814469	.4434234	.6261318
12		.0000284	.0014929	.0147177	.0637774	.1899114	.3299188	.5048008
13		.0000087	.0004929	.0040227	.0319772	.1007450	.2322440	.3058702
14		.0000017	.0001409	.0023083	.0150963	.0565836	.1441798	.2743785
15		.0000003	.0000374	.0008101	.0066594	.0297567	.0876330	.1914067
16			.0000093	.0002681	.0027517	.0147049	.0302802	.0640892
17			.0000022	.0000832	.0010678	.0063977	.0214897	.0541181
18			.0000006	.0000243	.0003901	.0029991	.0138641	.0448224
19			.0000001	.0000067	.0001345	.0012437	.0067057	.0244316
20				.0000017	.0000438	.0004874	.0030734	.0127968
21				.0000004	.0000135	.0001813	.0013378	.0063725
22				.0000001	.0000040	.0000640	.0004559	.0023080
23					.0000011	.0000215	.0002179	.0013646
24					.0000003	.0000069	.0000816	.0005883
25					.0000001	.0000021	.0000293	.0002422
26						.0000006	.0000100	.0000954
27						.0000002	.0000033	.0000359
28							.0000010	.0000130
29							.0000003	.0000045
30							.0000001	.0000015
31								.0000005
32								.0000001
	.09	.10	.11	.12	.13	.14	.15	.16
1	.9999990	.9999998	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	.9999838	.9999964	.9999993	.9999993	.9999993	.9999993	1.0000000	1.0000000
3	.9999754	.9999491	.9999526	.9999983	.9999996	.9999999	1.0000000	1.0000000
4	.9999607	.9998237	.9999535	.9999882	.9999971	.9999993	.9999998	1.0000000
5	.9975407	.9992461	.9997804	.9999389	.9999837	.9999958	.9999999	.9999998
6	.9924289	.9974234	.9991730	.9997482	.9999209	.9999797	.9999946	.9999986
7	.9805482	.9926641	.9974088	.9991369	.9997180	.9999178	.9999925	.9999975
8	.9570477	.9820878	.9930478	.9974697	.9991312	.9997192	.9999154	.9999711
9	.9166645	.9616697	.9836827	.9935196	.9975833	.9991492	.9997160	.9999098
10	.8554239	.9268833	.9659347	.9852603	.9940366	.9977314	.9991847	.9997821
11	.7724464	.8739306	.9358826	.9698304	.9867763	.9945693	.9979000	.9992322
12	.6709833	.8011876	.8899604	.9438164	.9733632	.9882044	.9950871	.9980786
13	.5580916	.7102588	.8261079	.9039086	.9508154	.9765494	.9895324	.9956064
14	.4430052	.6061188	.7447607	.8478144	.9160665	.9569913	.9794103	.9907328
15	.3348745	.4961920	.6492464	.7751469	.8667875	.9267446	.9624410	.9819659
16	.2407651	.3887085	.5453611	.6879459	.8019621	.8834144	.9360885	.9672482
17	.1645598	.2909285	.4402357	.5905879	.7288334	.8256619	.8980131	.9442893
18	.1069255	.2078474	.3409772	.4890649	.6320303	.7537674	.8466311	.9104679
19	.0660749	.1416902	.2528686	.3898493	.5349837	.6698906	.7816479	.8651974
20	.0388568	.0921690	.1775889	.2967038	.4372912	.5779032	.7043924	.8066183
21	.0217633	.0572291	.1220766	.2197801	.3445957	.4826140	.6178267	.7337660
22	.0116199	.0339358	.0794271	.1352062	.2261489	.3399361	.4626156	.5747916
23	.0059200	.0193305	.0494766	.1051747	.1908315	.3040890	.4298473	.5567130
24	.0028807	.0104315	.0295193	.0638927	.1240903	.2266323	.3468028	.4771138
25	.0013402	.0054032	.0167778	.0428871	.0903610	.1637286	.2677200	.3931318
26	.0005967	.0026853	.0092532	.0255812	.0588197	.1157568	.1796143	.2676540
27	.0002545	.0012789	.0048678	.0147253	.0347467	.0778979	.1436813	.2358675
28	.0001041	.0005843	.0024884	.0081463	.0220777	.0580565	.1298123	.2139878
29	.0000408	.0002633	.0011336	.0041333	.0127785	.0315828	.0748928	.1339177
30	.0000154	.0001081	.0005364	.0022177	.0071184	.0190026	.0432854	.0859328
31	.0000056	.0000438	.0002498	.0010925	.0038199	.0110329	.0270257	.0573717
32	.0000019	.0000171	.0001079	.0005184	.0019756	.0061781	.0162888	.0370147
33	.0000007	.0000064	.0000449	.0002371	.0009858	.0033380	.0092495	.0230799
34	.0000002	.0000023	.0000180	.0000105	.0000740	.0002748	.0008328	.0139107
35	.0000001	.0000008	.0000070	.0000445	.0002201	.0008768	.0028938	.0081061
36		.0000003	.0000026	.0000183	.0000987	.0004264	.0015189	.0045690
37		.0000001	.0000009	.0000072	.0000427	.0002005	.0007708	.0024901
38			.0000003	.0000028	.0000179	.0000911	.0003783	.0013135
39			.0000001	.0000010	.0000072	.0000401	.0001797	.0006706
40				.0000004	.0000028	.0000170	.0000824	.0003315
41					.0000001	.0000014	.0000070	.0001587
42					.0000004	.0000028	.0000158	.0000736
43					.0000001	.0000011	.0000066	.0000331
44						.0000004	.0000027	.0000144
45						.0000001	.0000011	.0000061
46						.0000001	.0000004	.0000028
47							.0000001	.0000010
48							.0000001	.0000004
49								.0000001
50								.0000001
	.17	.18	.19	.20	.21	.22	.23	.24
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	.9999993	.9999996	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000

$$P(c, h, p) = \sum_{r=0}^h \binom{h}{r} p^r (1-p)^{h-r}$$

n = 146

	.17	.18	.19	.20	.21	.22	.23	.24
8	.99999927	.99999980	.99999995	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
9	.99999727	.99999921	.99999978	.99999994	.99999998	1.00000000	1.00000000	1.00000000
10	.99999099	.99999721	.99999918	.99999977	.99999994	.99999999	1.00000000	1.00000000
11	.99997337	.99991211	.99999723	.99999517	.99999976	.99999993	.99999998	1.00000000
12	.99992875	.99997492	.99999160	.99997732	.99999918	.99999976	.99999993	.99999998
13	.99982593	.99993469	.99997673	.99992811	.99999745	.99999921	.99999977	.99999993
14	.99960887	.99983677	.99994078	.99997869	.99999270	.99999761	.99999925	.99999998
15	.99918651	.99965385	.99986068	.99994682	.99990700	.99999331	.99999780	.99999971
16	.9842524	.99988718	.99969532	.99976770	.99955865	.99980271	.99999359	.99999800
17	.9714163	.98628118	.99377776	.99733119	.99891599	.99958117	.99981465	.99999443
18	.9514912	.97521977	.98800112	.99458882	.99767747	.99905826	.99963322	.99986449
19	.92231409	.95781717	.97830582	.98967724	.99531101	.99799259	.99917677	.99986806
20	.8816424	.93208118	.96337728	.98139311	.99139787	.99685803	.99925811	.99982886
21	.8289499	.8952094	.9408330	.9682498	.99139280	.99923100	.99965157	.99985022
22	.7642390	.8489627	.90911103	.94805349	.97255977	.98614955	.99339289	.99701209
23	.6889185	.7900353	.86680112	.92055307	.95530997	.97687689	.98809300	.99430143
24	.6057286	.7202973	.81336339	.88827860	.93063317	.96126432	.97955881	.98979011
25	.5184187	.6418420	.7490876	.8344255	.90701366	.93956343	.96649255	.98242660
26	.4311388	.5577992	.67555111	.7754250	.8534086	.90968940	.94744473	.97107755
27	.3479496	.4719430	.5951918	.7067810	.7994490	.8704667	.9209724	.95431594
28	.2722218	.3881809	.51114570	.6305108	.7357236	.8211381	.8856253	.93099153
29	.2063021	.3100370	.4279807	.5494728	.6637178	.7624237	.8412068	.8995756
30	.1513648	.2402349	.3483068	.4670376	.5858346	.6948081	.7869772	.8592082
31	.1074806	.1804067	.2754199	.3866632	.5050925	.6304330	.7238073	.8094926
32	.0738470	.1314054	.2114444	.3114743	.4284789	.5619348	.6531983	.7507454
33	.0490904	.0926865	.1578144	.2439218	.3480553	.4623771	.5773945	.6840781
34	.0315737	.0633254	.1138354	.1855010	.2776803	.3848401	.4991805	.6133139
35	.0196497	.0419040	.0797446	.1371067	.2153554	.3121459	.4215341	.5350099
36	.0118344	.0260583	.0541719	.0983272	.1624070	.2465528	.3473163	.4578723
37	.0068989	.0166743	.0356764	.0684347	.1190109	.1895293	.2789620	.3876747
38	.0038935	.0100282	.0227783	.0462173	.0847150	.1416964	.2182618	.3122512
39	.0021278	.0058435	.0141000	.0302658	.0585457	.1029977	.1662528	.2483788
40	.0011263	.0032996	.0084628	.0192550	.0393147	.0727714	.1232328	.1953392
41	.0005776	.0018059	.0049256	.0110787	.0256226	.0493661	.0868587	.1353392
42	.0002871	.0009582	.0027805	.0071111	.0162195	.0333634	.0623133	.1068170
43	.0001303	.0004930	.0015226	.0041314	.0099679	.0216102	.0424903	.0764048
44	.0000646	.0002						

$$f(r, p, r) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 246

[illegible][illegible]

$$f_{n,p}(x) = \sum_{k=0}^n \frac{f^{(k)}(x)}{k!} p^k (1-p)^{n-k}$$

n = 100

N	.33	.34	.35	.36	.37	.38	.39	.40
54	.07713540	.36851144	.46809047	.56939993	.664831	.7500657	.8217547	.8765967
55	.07813046	.3688685	.46809007	.56909041	.6600402	.744480	.815181	.8705132
56	.07912140	.3692011	.4683955	.5693704	.658582	.740093	.810311	.8655567
57	.08010807	.3695110	.4686771	.5696372	.6562904	.7366937	.8055944	.8608032
58	.08109119	.3698034	.4689375	.5698857	.6538304	.7325100	.8014853	.8562496
59	.08207084	.3700793	.4691875	.5701192	.6513006	.7279011	.7972607	.8518068
60	.0830470	.3703391	.4694299	.5703397	.6486977	.7230095	.7929167	.8474896
61	.0840207	.3705928	.4696656	.5705463	.6460331	.7180011	.7883863	.8432968
62	.0849920	.3708404	.4698957	.5707397	.6433077	.7130000	.7836683	.8392288
63	.0859608	.3710820	.4701203	.5709200	.6405214	.7080000	.7787683	.8352848
64	.0869271	.3713177	.4703397	.5710872	.6376742	.7030000	.7736883	.8314648
65	.0878908	.3715475	.4705540	.5712414	.6347660	.6980000	.7685283	.8277688
66	.0888520	.3717713	.4707643	.5713825	.6317967	.6930000	.7632883	.8241968
67	.0898107	.3719891	.4709706	.5715107	.6287674	.6880000	.7579683	.8207488
68	.0907669	.3722009	.4711729	.5716260	.6256791	.6830000	.7525683	.8174248
69	.0917206	.3724067	.4713712	.5717283	.6225318	.6780000	.7470883	.8142248
70	.0926718	.3726065	.4715655	.5718175	.6193255	.6730000	.7415283	.8111488
71	.0936205	.3728003	.4717558	.5718937	.6160592	.6680000	.7358883	.8081968
72	.0945667	.3729881	.4719421	.5719569	.6127329	.6630000	.7301683	.8053688
73	.0955104	.3731709	.4721244	.5720072	.6093466	.6580000	.7243683	.8026648
74	.0964516	.3733477	.4723027	.5720445	.6059003	.6530000	.7184883	.8000848
75	.0973903	.3735195	.4724770	.5720688	.6023940	.6480000	.7125283	.7976288
76	.0983265	.3736863	.4726473	.5720800	.5988277	.6430000	.7064883	.7952968
77	.0992602	.3738481	.4728136	.5720783	.5952014	.6380000	.7003683	.7930888
78	.1001914	.3740049	.4729759	.5720635	.5915151	.6330000	.6941683	.7909968
79	.1011201	.3741567	.4731342	.5720357	.5877688	.6280000	.6878883	.7890208
80	.1020463	.3743035	.4732885	.5720040	.5839625	.6230000	.6815283	.7871688
81	.1029699	.3744453	.4734388	.5719583	.5800962	.6180000	.6750883	.7854368
82	.1038911	.3745821	.4735851	.5719086	.5761699	.6130000	.6685683	.7838208
83	.1048098	.3747139	.4737274	.5718549	.5721836	.6080000	.6619683	.7823248
84	.1057260	.3748407	.4738657	.5717972	.5681373	.6030000	.6552883	.7809488
85	.1066397	.3749625	.4740000	.5717355	.5640310	.5980000	.6485283	.7796928
86	.1075509	.3750793	.4741313	.5716698	.5598647	.5930000	.6416883	.7785568
87	.1084596	.3751911	.4742586	.5715991	.5556384	.5880000	.6347683	.7775408
88	.1093658	.3752979	.4743819	.5715234	.5513521	.5830000	.6277683	.7766448
89	.1102695	.3753997	.4745012	.5714427	.5470058	.5780000	.6206883	.7758688
90	.1111707	.3754965	.4746165	.5713570	.5426095	.5730000	.6135283	.7752128

N	.41	.42	.43	.44	.45	.46	.47	.48
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
14	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
15	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
16	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
17	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
18	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
19	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
20	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
21	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
22	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
23	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
24	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
25	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
26	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
27	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
28	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
29	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
30	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
31	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
32	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
33	.9999991	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
34	.9999978	.9999993	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
35	.9999948	.9999983	.9999995	.9999998	1.0000000	1.0000000	1.0000000	1.0000000
36	.9999882	.9999960	.9999987	.9999996	.9999999	1.0000000	1.0000000	1.0000000
37	.9999740	.9999909	.9999969	.9999990	.9999997	.9999999	1.0000000	1.0000000
38	.9999447	.9999797	.9999930	.9999977	.9999993	.9999998	.9999999	1.0000000
39	.9999061	.9999567	.9999863	.9999946	.9999983	.9999995	.9999998	1.0000000
40	.9998736	.9999104	.9999663	.9999880	.9999955	.9999987	.9999996	.9999999
41	.9998564	.9998808	.9999300	.9999740	.9999908	.9999969	.9999990	.9999997
42	.9998482	.9998650	.9999151	.9999556	.9999801	.9999931	.9999977	.9999993
43	.9998449	.9998582	.9999133	.9999529	.9999784	.9999914	.9999960	.9999983
44	.9998430	.9998572	.9999133	.9999529	.9999784	.9999914	.9999960	.9999983
45	.9998430	.9998572	.9999133	.9999529	.9999784	.9999914	.9999960	.9999983
46	.9998430	.9998572	.9999133	.9999529	.9999784	.9999914	.9999960	.9999983
47	.9998430	.9998572	.9999133	.9999529	.9999784	.9999914	.9999960	.9999983
48	.9998430	.9998572	.9999133	.9999529	.9999784	.9999914	.9999960	.9999983
49	.9998430	.9998572	.9999133	.9999529	.9999784	.9999914	.9999960	.9999983
50	.9998430	.9998572	.9999133	.9999529	.9999784	.9999914	.9999960	.9999983
51	.9998430	.9998572	.9999133	.9999529	.9999784	.9999914	.9999960	.9999983
52	.9998430	.9998572	.9999133	.9999529	.9999784	.9999914	.9999960	.9999983
53	.9998430	.9998572	.9999133	.9999529	.9999784	.9999914	.9999960	.9999983
54	.9998430	.9998572	.9999133	.9999529	.9999784	.9999914	.9999960	.9999983

$$F(n, m, r) = \sum_{i=0}^n \binom{n}{i} p^i (1-p)^{n-i}$$

n = 146

N	.43	.43	.43	.44	.45	.46	.47	.48
55	.8161777	.8733397	.9175147	.9405601	.9694576	.9827503	.9907416	.9958610
56	.7676441	.8353886	.8806641	.9081246	.9358094	.9614405	.9846144	.9953961
57	.7188485	.7900245	.8353886	.8696632	.9014405	.9358094	.9614405	.9846144
58	.6676441	.7388485	.7900245	.8353886	.8696632	.9014405	.9358094	.9614405
59	.6138485	.6850245	.7388485	.7900245	.8353886	.8696632	.9014405	.9358094
60	.5581246	.6293245	.6850245	.7388485	.7900245	.8353886	.8696632	.9014405
61	.4993245	.5705245	.6293245	.6850245	.7388485	.7900245	.8353886	.8696632
62	.4375245	.5087245	.5705245	.6293245	.6850245	.7388485	.7900245	.8353886
63	.3727245	.4439245	.5087245	.5705245	.6293245	.6850245	.7388485	.7900245
64	.3059245	.3771245	.4439245	.5087245	.5705245	.6293245	.6850245	.7388485
65	.2371245	.3083245	.3771245	.4439245	.5087245	.5705245	.6293245	.6850245
66	.1673245	.2385245	.3083245	.3771245	.4439245	.5087245	.5705245	.6293245
67	.0965245	.1677245	.2385245	.3083245	.3771245	.4439245	.5087245	.5705245
68	.0247245	.0959245	.1677245	.2385245	.3083245	.3771245	.4439245	.5087245
69	.0029245	.0091245	.0247245	.0959245	.1677245	.2385245	.3083245	.3771245
70	.0001245	.0003245	.0029245	.0091245	.0247245	.0959245	.1677245	.2385245
71	.0000245	.0000245	.0001245	.0003245	.0009245	.0025245	.0061245	.0147245
72	.0000045	.0000045	.0000245	.0000245	.0000445	.0000845	.0001645	.0003245
73	.0000005	.0000005	.0000045	.0000045	.0000085	.0000165	.0000325	.0000645
74	.0000000	.0000000	.0000005	.0000005	.0000009	.0000017	.0000033	.0000065
75	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
76	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
77	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
78	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
79	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
80	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
81	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
82	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
83	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
84	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
85	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
86	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
87	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
88	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
89	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
90	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
91	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
92	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
93	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
94	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
95	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
96	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
97	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
98	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
99	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
100	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
101	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
102	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000

N	.19	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	1.00000000	1.00000000
19	1.00000000	1.00000000
20	1.00000000	1.00000000
21	1.00000000	1.00000000
22	1.00000000	1.00000000
23	1.00000000	1.00000000
24	1.00000000	1.00000000
25	1.00000000	1.00000000
26	1.00000000	1.00000000
27	1.00000000	1.00000000
28	1.00000000	1.00000000
29	1.00000000	1.00000000
30	1.00000000	1.00000000
31	1.00000000	1.00000000
32	1.00000000	1.00000000
33	1.00000000	1.00000000
34	1.00000000	1.00000000
35	1.00000000	1.00000000
36	1.00000000	1.00000000
37	1.00000000	1.00000000
38	1.00000000	1.00000000
39	1.00000000	1.00000000
40	1.00000000	1.00000000
41	.99999999	1.00000000
42	.99999998	.99999999
43	.99999997	.99999998
44	.99999996	.99999997
45	.99999995	.99999996

$$E(x, n, r) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 146

	.49	.50
46	.9999937	.9999973
47	.9999864	.9999954
48	.9999714	.9999849
49	.9999418	.9999707
50	.9998845	.9999363
51	.9997781	.9997718
52	.9995856	.9995303
53	.9992477	.9991601
54	.9987710	.9984137
55	.9981678	.9977550
56	.9974378	.9969174
57	.9965871	.9959406
58	.9956170	.9949710
59	.9945333	.9939505
60	.9933409	.9928443
61	.9920486	.9916103
62	.9906565	.9902684
63	.9891743	.9888311
64	.9876018	.9873011
65	.9859496	.9858321
66	.9842170	.9840845
67	.9824047	.9829031
68	.9805224	.9816666
69	.9785701	.9793759
70	.9765479	.9770335
71	.9744556	.9746418
72	.9722933	.9721988
73	.9699610	.9696602
74	.9674687	.9670398
75	.9648164	.9640108
76	.9620141	.9610818
77	.9590718	.9581265
78	.9560095	.9550411
79	.9528272	.9518394
80	.9495249	.9494683
81	.9461026	.9471375
82	.9425603	.9439079
83	.9389080	.9397699
84	.9351457	.9359309
85	.9312734	.9319014
86	.9272911	.9277997
87	.9232088	.9235557
88	.9190265	.9190495
89	.9147442	.9145082
90	.9103619	.9103094
91	.9058796	.9058124
92	.9012973	.9010450
93	.8966150	.8963863
94	.8918327	.8913199
95	.8869504	.8867697
96	.8819681	.8818875
97	.8768858	.8768049
98	.8717035	.8716213
99	.8664212	.8663391
100	.8610389	.8609568
101	.8555566	.8554745
102	.8500743	.8500000
103	.8445920	.8445257
104	.8391097	.8390514
105	.8336274	.8335771

[illegible]

	.09	.10	.11	.12	.13	.14	.15	.16
1	.99999990	.99999998	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	.99999982	.99999977	.99999993	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
3	.99999950	.99999971	.99999953	.99999985	.99999997	.99999992	1.00000000	1.00000000
4	.99999907	.99999958	.99999978	.99999989	.99999997	.99999996	1.00000000	1.00000000
5	.9977045	.9993019	.9997998	.99939748	.9990855	.9997963	.9999991	.99999998
6	.9928890	.9976057	.9998390	.99977711	.99755342	.99885802	.99999985	.99999986
7	.9816174	.9914100	.99760279	.99921088	.99883677	.99883677	.99999768	.99999943
8	.9851638	.9831474	.99550375	.99765897	.99800613	.99774530	.99999768	.99999943
9	.9808990	.9637115	.9847109	.99777821	.99877821	.99902807	.9997455	.99999901
10	.9809356	.9303619	.96788170	.9843514	.9944777	.99795599	.9992644	.99977581
11	.77791913	.87938859	.93911883	.97716820	.98772061	.99501119	.99889327	.99931603
12	.68011350	.80046819	.90501111	.97469301	.97510629	.99090917	.99855176	.99983131
13	.56035119	.71935117	.83118185	.90869755	.93974666	.97018111	.99336772	.99800099
14	.45136630	.61653333	.73370897	.85454547	.93006010	.97577295	.99808847	.99918993
15	.34460669	.50771846	.65977530	.78316670	.87319631	.93009792	.96440664	.98337758
16	.24932350	.39946669	.55867085	.69841000	.81030604	.88948807	.94004114	.96960366
17	.17141813	.30070665	.45179295	.60227099	.73296615	.81214788	.90372844	.95499999
18	.11311926	.20618585	.35180666	.50124777	.64088111	.76340387	.85433584	.91619504
19	.06975114	.14830559	.26256496	.40178580	.54785997	.68163333	.79135854	.87350815
20	.04130665	.09719310	.18764496	.30964113	.44999413	.60070112	.71598007	.81509141
21	.02130617	.06072331	.12840300	.24988510	.43565461	.69016665	.83080665	.94710124
22	.01130617	.03072331	.06411885	.12695550	.24789930	.40093390	.53990023	.66777476
23	.00643330	.01777111	.03711785	.07300104	.13660666	.24400338	.38913768	.53999999
24	.00315484	.00813034	.01771146	.03720665	.07314707	.13691878	.24400338	.40916627
25	.00147888	.00390669	.00828604	.01770715	.03662199	.07345351	.13690897	.24403693
26	.00066666	.00169573	.00360910	.00763390	.01639466	.03275588	.06063011	.10007195
27	.00038533	.00094195	.00205509	.00460880	.00936160	.01819880	.03640713	.06468493
28	.00021176	.00053336	.00117034	.00253584	.00519334	.01034113	.02063927	.04137906
29	.00010465	.00026891	.00053332	.00117909	.00239887	.00479667	.00939450	.01819577
30	.00001177	.00002829	.00006066	.00012716	.00025588	.00051160	.00102330	.00204690
31	.00000065	.00000160	.00000336	.00000707	.00001414	.00002828	.00005656	.00011311
32	.00000033	.00000080	.00000160	.00000336	.00000672	.00001344	.00002688	.00005376
33	.00000008	.00000020	.00000040	.00000080	.00000160	.00000320	.00000640	.00001280
34	.00000003	.00000008	.00000016	.00000032	.00000064	.00000128	.00000256	.00000512
35	.00000001	.00000002	.00000004	.00000008	.00000016	.00000032	.00000064	.00000128
36	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
37	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
38	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
39	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
40	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
41	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
42	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
43	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
44	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
45	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
46	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
47	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
48	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
49	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000
50	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000	.00000000

[illegible]

$$P(n, n, p) = \sum_{i=0}^n \binom{n}{i} p^i (1-p)^{n-i}$$

n = 147

	.17	.18	.19	.20	.21	.22	.23	.24
7	.9999985	.9999996	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	.9999936	.9999983	.9999996	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
9	.9999761	.9999931	.9999981	.9999995	.9999999	1.0000000	1.0000000	1.0000000
10	.9999206	.9999737	.9999929	.9999980	.9999995	.9999999	1.0000000	1.0000000
11	.9997636	.9999229	.9999760	.9999929	.9999980	.9999994	.9999999	1.0000000
12	.9993633	.9997785	.9999267	.9999769	.9999930	.9999980	.9999994	.9999999
13	.9984341	.9994183	.9997756	.9999115	.9999781	.9999833	.9999980	.9999995
14	.9964377	.9986005	.9994761	.9998137	.9999370	.9999797	.9999937	.9999982
15	.9925851	.9968802	.9987590	.9995319	.9998322	.9999427	.9999814	.9999942
16	.9885466	.9935318	.9972674	.9989073	.9995854	.9998505	.9999466	.9999832
17	.9736865	.9874680	.9943810	.9976189	.9990441	.9996357	.9998080	.9999544
18	.9548903	.9772109	.9891635	.9951369	.9979354	.9991690	.9998823	.9999844
19	.9271304	.9609496	.9803247	.9906535	.9958067	.9982182	.9992817	.9999248
20	.8885271	.9367142	.9662480	.9830490	.9919649	.9963975	.9984694	.9993827
21	.8379242	.9026664	.9451156	.9708705	.9854290	.9931109	.9969164	.9986911
22	.7752439	.8574671	.9151377	.9524779	.9749219	.9875048	.9941111	.9973704
23	.7017165	.8006422	.8740643	.9261316	.9589255	.9784488	.9891200	.9949817
24	.6198695	.7328501	.8235227	.8903249	.9358157	.9645670	.9815211	.9908621
25	.5332564	.6559639	.7613001	.8440976	.9040762	.9443375	.9694977	.9841934
26	.4459754	.5729269	.6894906	.7872257	.8625658	.9162652	.9518277	.9738011
27	.3630914	.4873971	.6104525	.7205106	.8107489	.8791123	.9270516	.9564021
28	.2850955	.4032581	.5273666	.6457650	.7491082	.8321508	.8939092	.9366094
29	.2175085	.3241029	.4438412	.5656804	.6788390	.7753841	.8514690	.9071134
30	.1607039	.2528033	.3634448	.4835246	.6021901	.7096033	.7994500	.8688964
31	.1149408	.1912422	.2892684	.4027381	.5220483	.6367948	.7383332	.8214243
32	.0795647	.1402400	.2235397	.3265121	.4416448	.5592037	.6694328	.7648447
33	.0532991	.0996559	.1677611	.2574323	.3641673	.4790718	.5948280	.7000760
34	.0345516	.0686104	.1221167	.1972492	.2923958	.4010961	.5171697	.6287994
35	.0216768	.0457606	.0862177	.1468015	.2284268	.3281543	.4393928	.5533300
36	.0131630	.0295657	.0590307	.1060831	.1735268	.2610033	.3643864	.4763853
37	.0077379	.0185074	.0391905	.0744132	.1281242	.2020788	.2946835	.4007906
38	.0044044	.0112245	.0252289	.0506607	.0919172	.1522156	.2322224	.3291744
39	.0024280	.0065967	.0157489	.0334715	.0640563	.1151514	.1782147	.2637082
40	.0012966	.0037575	.0095338	.0214610	.0433573	.0794212	.1331274	.2059283
41	.0006709	.0020748	.0055976	.0133540	.0285012	.0549933	.0967648	.1566633
42	.0003365	.0011108	.0031880	.0080646	.0181950	.0369347	.0684187	.1160623
43	.0001636	.0005767	.0017616	.0047273	.0112808	.0241900	.0470496	.0837037
44	.0000771	.0002905	.0009445	.0026900	.0067927	.0153709	.0314633	.0587815
45	.0000353	.0001419	.0004915	.0014861	.0039728	.0094914	.0204590	.0401269
46	.0000157	.0000673	.0002483	.0007972	.0022571	.0056958	.0129354	.0266649
47	.0000067	.0000310	.0001218	.0004153	.0012458	.0033219	.0079523	.0172304
48	.0000028	.0000118	.0000580	.0002102	.0006681	.0018831	.0047537	.0108415
49	.0000011	.0000060	.0000268	.0001033	.0003481	.0010376	.0027632	.0066630
50	.0000005	.0000025	.0000121	.0000494	.0001763	.0005558	.0015619	.0039479
51	.0000002	.0000010	.0000053	.0000229	.0000868	.0002895	.0008586	.0022860
52	.0000001	.0000004	.0000022	.0000103	.0000415	.0001466	.0004591	.0012878
53		.0000002	.0000009	.0000045	.0000193	.0000722	.0002388	.0007058
54		.0000001	.0000004	.0000019	.0000067	.0000346	.0001208	.0003764
55			.0000001	.0000008	.0000038	.0000161	.0000594	.0001953
56			.0000001	.0000003	.0000016	.0000073	.0000285	.0000986
57				.0000001	.0000007	.0000032	.0000133	.0000485
58					.0000003	.0000014	.0000060	.0000238
59					.0000001	.0000006	.0000027	.0000108
60						.0000002	.0000011	.0000049
61						.0000001	.0000005	.0000022
62							.0000002	.0000009
63							.0000001	.0000004
64								.0000002
65								.0000001

	.25	.26	.27	.28	.29	.30	.31	.32
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
14	.9999995	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
15	.9999983	.9999995	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
16	.9999947	.9999984	.9999995	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
17	.9999850	.9999953	.9999986	.9999996	.9999999	1.0000000	1.0000000	1.0000000
18	.9999600	.9999861	.9999958	.9999987	.9999996	.9999999	1.0000000	1.0000000
19	.9998997	.9999652	.9999885	.9999963	.9999989	.9999997	.9999999	1.0000000
20	.9997633	.9999136	.9999695	.9999900	.9999968	.9999990	.9999997	.9999999
21	.9994723	.9997977	.9999261	.9999743	.9999915	.9999973	.9999992	.9999998
22	.9988857	.9995514	.9998281	.9999373	.9999782	.9999928	.9999977	.9999993
23	.9977659	.9990537	.9998306	.9999349	.9999472	.9999617	.9999939	.9999981
24	.9953732	.9981092	.9998033	.9999688	.9999783	.9999858	.9999947	.9999949
25	.9922434	.9963910	.9984060	.9999309	.9999732	.9999855	.9999938	.9999973
26	.9865136	.9934209	.9969550	.9986615	.9994407	.9997777	.9999158	.9999697
27	.9775515	.9885242	.9944369	.9974400	.9988807	.9995347	.9998159	.9999307
28	.9641637	.9808141	.9902630	.9953112	.9978557	.9990680	.9996147	.9998484
29	.9430382	.9692042	.9836468	.9917631	.9960615	.9982108	.9992873	.9996825
30	.9180782	.9524655	.9736054	.9861011	.9930542	.9967034	.9985131	.9993623
31	.8845794	.9293333	.9589971	.9774404	.9882227	.9941683	.9973209	.9987694
32	.8414293	.8986378	.9386050	.9647288	.9807747	.9900581	.9951108	.9977164
33	.7892897	.8595803	.9112641	.9468088	.9697469	.9836666	.9916853	.9959803
34	.7280724	.8117514	.8760230	.9225234	.9540501	.9741297	.9861683	.9929744

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$$P(o, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 147

	.25	.26	.27	.28	.29	.30	.31	.32
35	.6610317	.7653967	.8323218	.8908570	.9385531	.9604255	.9779478	.9883265
36	.5881835	.6914599	.7801357	.8510982	.9042047	.9414634	.9660236	.9818648
37	.51261028	.6215920	.7200859	.8029949	.8681814	.9161807	.9493378	.9692861
38	.4370879	.5479369	.6344554	.7068845	.7648845	.8090845	.8412845	.8612845
39	.3641914	.4730246	.5582119	.6268979	.6771196	.7184364	.7512845	.7762845
40	.2962792	.3994620	.4833730	.5503116	.6012705	.6362845	.6652845	.6892845
41	.2351883	.3296770	.4047301	.4629320	.5065656	.5391466	.5664949	.5877070
42	.1819801	.2656882	.3336461	.3875788	.4302711	.4626896	.4862419	.5032419
43	.1372576	.2084665	.2672917	.3152386	.3542071	.3842845	.4072845	.4242845
44	.1008490	.1602650	.2137363	.2629783	.3082175	.3492845	.3862845	.4192845
45	.0721635	.1198365	.1649731	.2070490	.2462968	.2822845	.3152845	.3452845
46	.0503775	.0873238	.1206205	.1512479	.1788080	.2032399	.2244553	.2423891
47	.0341009	.0619537	.0924857	.1231285	.1539935	.1832137	.2092845	.2312845
48	.0231384	.0458878	.0703345	.0952867	.1206409	.1462845	.1722845	.1982845
49	.0144665	.0308869	.0530570	.0793376	.1073018	.1362845	.1652845	.1942845
50	.0094072	.0189315	.0354097	.0647394	.1070189	.1632402	.2399530	.3287494
51	.0053066	.0108883	.0243415	.0452279	.0779723	.1253725	.1889514	.2669151
52	.0032018	.0075151	.0175519	.0376619	.0707071	.1182037	.1802845	.2562845
53	.0018005	.0045486	.0100550	.0204350	.0392916	.0670171	.1022229	.1542845
54	.0010551	.0026804	.0066919	.0132125	.0259340	.0472157	.0801131	.1272599
55	.0005762	.0015378	.0037376	.0083233	.0170766	.0324432	.0573472	.0947343
56	.0003063	.0008590	.0021901	.0051082	.0109592	.0217380	.0400523	.0688535
57	.0001585	.0004274	.0010479	.0023093	.0047353	.0094206	.0182037	.0338125
58	.0000798	.0002137	.0005246	.0011788	.0024775	.0050435	.0101310	.0192845
59	.0000391	.0001275	.0003760	.0010093	.0024810	.0056138	.0117478	.0228556
60	.0000187	.0000640	.0001982	.0005578	.0014357	.0033966	.0074318	.0150434
61	.0000087	.0000313	.0001010	.0003003	.0008095	.0020029	.0045712	.0096658
62	.0000039	.0000129	.0000509	.0001575	.0004447	.0011510	.0027447	.0062535
63	.0000017	.0000069	.0000248	.0000805	.0002380	.0006446	.0016064	.0036994
64	.0000007	.0000031	.0000118	.0000400	.0001241	.0003818	.0009164	.0020034
65	.0000003	.0000014	.0000054	.0000194	.0000631	.0001871	.0005095	.0011794
66	.0000001	.0000006	.0000024	.0000092	.0000312	.0000969	.0002761	.0007242
67	.0000001	.0000001	.0000011	.0000042	.0000151	.0000450	.0001458	.0003995
68		.0000001	.0000005	.0000019	.0000071	.0000240	.0000750	.0002149
69			.0000002	.0000008	.0000032	.0000115	.0000376	.0001128
70			.0000001	.0000004	.0000014	.0000054	.0000184	.0000578
71			.0000001	.0000006	.0000025	.0000085	.0000288	.0000884
72			.0000001	.0000003	.0000011	.0000041	.000013	
73			.0000001		.0000005	.0000018	.0000066	
74					.0000002	.0000008	.0000030	
75					.0000001	.0000003	.0000014	
76						.0000001	.0000005	
77							.0000003	
78							.0000001	

[illegible]

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 147

	.33	.34	.35	.36	.37	.38	.39	.40
49	.4967202	.5988530	.6990680	.7751471	.8428814	.8952710	.9334715	.9597546
50	.4973146	.5996607	.6990409	.7197606	.7978771	.8603841	.9081569	.9424308
51	.3603123	.4602830	.5618772	.6587139	.7454269	.8184748	.8764349	.9197944
52	.8975454	.3983656	.4930026	.5933943	.6871736	.7696204	.8378606	.8910920
53	.3404716	.3277728	.4247111	.5255624	.6240129	.7143409	.7923133	.8557660
54	.1900839	.9661289	.3587193	.4571705	.5575227	.6536108	.7401529	.8135528
55	.1468825	.2146433	.2868601	.3902035	.4825473	.5688176	.6490829	.7245640
56	.1109028	.1660535	.2405379	.3265088	.4220426	.5216683	.6193050	.7093406
57	.0817899	.1286636	.1907144	.2676480	.3569105	.4540548	.5533462	.6488579
58	.0588963	.0961951	.1478893	.2147895	.2958413	.3870954	.4860620	.5844844
59	.0413996	.0702786	.1130967	.1686522	.2401871	.3249740	.4199904	.5178912
60	.0284000	.0501264	.0830266	.1295040	.1908613	.2686801	.3548935	.4509217
61	.0190922	.03349084	.06000722	.09720666	.14841106	.2145061	.2945083	.38354403
62	.0124124	.0237258	.0424424	.0712946	.1128359	.1687939	.2394459	.32317796
63	.00979055	.0157353	.0282747	.0510794	.0830553	.1289313	.1906148	.26566051
64	.00749105	.012813	.0197894	.0340921	.0538169	.08179426	.1131464	.1605051
65	.0059744	.0064261	.0129477	.0244091	.0431698	.0719426	.1131464	.1605051
66	.0017567	.0039559	.0082992	.0162729	.0299148	.0517101	.0842990	.1299307
67	.0010115	.0023749	.0051893	.0105869	.0208283	.0363033	.0613658	.0979802
68	.0005678	.0013901	.0031649	.0067202	.0133507	.0248974	.0435211	.0712990
69	.0003107	.0007993	.0018894	.0041613	.0085987	.0166857	.030348	.0520320
70	.0001657	.0004416	.0010928	.0025183	.0054033	.0106793	.0205700	.0366160
71	.0000862	.0002395	.0006174	.0014804	.0033122	.0069343	.0136205	.0251640
72	.0000436	.0001266	.0003404	.0008503	.0019121	.0041121	.0086019	.0168678
73	.0000216	.0000627	.0001829	.0004762	.0010547	.0022617	.0045500	.0090000
74	.0000104	.0000325	.0000958	.0002600	.0006565	.0015474	.0034139	.0070669
75	.0000049	.0000160	.0000489	.0001383	.0003639	.0008927	.0020483	.0044064
76	.0000022	.0000076	.0000213	.0000718	.0001966	.0005021	.0011984	.0026800
77	.0000010	.0000036	.0000118	.0000393	.0001035	.0002723	.0006837	.0015897
78	.0000004	.0000016	.0000056	.0000179	.0000531	.0001471	.0003802	.0009194
79	.0000002	.0000007	.0000026	.0000086	.0000266	.0000766	.0002061	.0005184
80	.0000001	.0000003	.0000011	.0000040	.0000129	.0000389	.0001089	.0002849
81		.0000001	.0000005	.0000018	.0000061	.0000192	.0000561	.0001526
82		.0000001	.0000002	.0000008	.0000028	.0000093	.0000281	.0000796
83			.0000001	.0000003	.0000013	.0000043	.0000137	.0000405
84				.0000001	.0000006	.0000020	.0000065	.0000201
85				.0000001	.0000009	.0000030	.0000090	.0000297
86					.0000001	.0000004	.0000014	.0000045
87						.0000002	.0000006	.0000021
88						.0000001	.0000003	.0000009
89							.0000001	.0000004
90								.0000002
91								.0000000

[illegible]

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$$P(x, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 147

	.41	.42	.43	.44	.45	.46	.47	.48
50	.9656422	.9804900	.9894056	.9945947	.9973659	.9987017	.9994686	.9997778
51	.9504025	.9708046	.9836323	.9912985	.9956001	.9978880	.9990392	.9995848
52	.9302502	.9574651	.9753114	.9863727	.9928523	.9964339	.9983174	.9992460
53	.9044193	.9385320	.9636248	.9792276	.9887017	.9941696	.9971374	.9986086
54	.8722310	.9164848	.9473669	.9691640	.9826146	.9906854	.9952616	.9977133
55	.8332956	.8871069	.9273594	.9554016	.9739451	.9855292	.9933661	.9961782
56	.7875441	.8515801	.9010470	.9371162	.9619511	.9781021	.9880243	.9937822
57	.7353120	.8090774	.8684368	.9135132	.9458293	.9677082	.9816988	.9901488
58	.6773644	.7599410	.8291620	.8839058	.9247706	.9535788	.9727435	.9847942
59	.6148785	.7047202	.7831870	.8478061	.8980347	.9348880	.9604805	.9771245
60	.5493769	.6444169	.7308687	.8050241	.8650372	.9108781	.9439359	.9664449
61	.4826171	.5803621	.6729821	.7557206	.8254400	.8808805	.9224956	.9519864
62	.4164508	.5142072	.6107002	.7004707	.7792336	.8444354	.8953786	.9339514
63	.3526722	.4477575	.5455281	.6402459	.7267940	.8013719	.8620288	.9098799
64	.2928744	.3888162	.4791945	.5764228	.6689061	.7518779	.8221138	.8788254
65	.2383343	.3211325	.4135154	.5105349	.6087424	.6965408	.7756630	.8414507
66	.1899379	.2640771	.3502473	.4445499	.5417966	.6363480	.7230638	.7981044
67	.1481534	.2127452	.2909481	.3700775	.4557773	.5426423	.6268114	.7033226
68	.1130494	.1678066	.2368662	.3180356	.4044746	.5070348	.6098111	.7040675
69	.0843502	.1295222	.1888677	.2622254	.3476164	.4419845	.5481615	.6526705
70	.0615163	.0977812	.1474106	.2112996	.2887334	.3771576	.4723492	.5689993
71	.0438353	.0721694	.1128618	.1667136	.2350505	.3162879	.4073175	.5035090
72	.03055101	.0520857	.0840506	.1287213	.1874164	.2600542	.3447744	.4379477
73	.0207359	.0366814	.0613473	.0972518	.1462778	.2094900	.2866204	.3740675
74	.0137571	.0252433	.0437510	.0717661	.1116968	.1652368	.2389161	.3134856
75	.0089681	.0169605	.0304766	.0517909	.0834032	.1275396	.1855912	.2575639
76	.0056280	.0111226	.0207296	.0365064	.0609713	.0962835	.1447641	.2073203
77	.0034606	.0071176	.0137636	.0251102	.0434063	.0710593	.1104648	.1633827
78	.0020850	.0044435	.0089180	.0168878	.0302303	.0512464	.0824180	.1259832
79	.0012220	.0027566	.0056375	.01110759	.0205556	.0360997	.0600875	.0950030
80	.0006983	.0016065	.0034760	.0070374	.0136419	.0248303	.0428803	.0700278
81	.0003889	.0009249	.0020900	.0044237	.0088337	.0166703	.0297780	.0504303
82	.0002111	.0005247	.0012251	.0026925	.0055797	.0109207	.0202192	.0354670
83	.0001117	.0002885	.0007000	.0015977	.0034369	.0069786	.0133966	.0243498
84	.0000575	.0001546	.0003897	.0009241	.0020618	.0043487	.0086594	.0163133
85	.0000289	.0000807	.0002114	.0005208	.0012079	.0026418	.0054570	.0106612
86	.0000141	.0000410	.0001117	.0002859	.0006888	.0015642	.0035329	.0067942
87	.0000067	.0000203	.0000575	.0001529	.0003827	.0009023	.0020077	.0042289
88	.0000031	.0000098	.0000288	.0000796	.0002071	.0005071	.0011713	.0025554
89	.0000014	.0000046	.0000140	.0000404	.0001091	.0002775	.0006655	.0015072
90	.0000006	.0000021	.0000067	.0000199	.0000559	.0001478	.0003682	.0008657
91	.0000003	.0000009	.0000031	.0000096	.0000279	.0000766	.0001963	.0004842
92	.0000001	.0000004	.0000014	.0000045	.0000135	.0000387	.0001039	.0002635
93	.0000000	.0000002	.0000006	.0000020	.0000064	.0000190	.0000505	.0001394
94	.0000000	.0000001	.0000003	.0000009	.0000029	.0000091	.0000263	.0000719
95	.0000000	.0000001	.0000001	.0000004	.0000013	.0000042	.0000137	.0000360
96	.0000000	.0000000	.0000000	.0000002	.0000006	.0000019	.0000059	.0000175
97	.0000000	.0000000	.0000000	.0000001	.0000004	.0000012	.0000037	.0000108
98	.0000000	.0000000	.0000000	.0000000	.0000001	.0000004	.0000012	.0000034
99	.0000000	.0000000	.0000000	.0000000	.0000000	.0000001	.0000003	.0000007
100	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
101	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000001	.0000003
102	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000001

	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	1.00000000	1.00000000
19	1.00000000	1.00000000
20	1.00000000	1.00000000
21	1.00000000	1.00000000
22	1.00000000	1.00000000
23	1.00000000	1.00000000
24	1.00000000	1.00000000
25	1.00000000	1.00000000
26	1.00000000	1.00000000
27	1.00000000	1.00000000
28	1.00000000	1.00000000
29	1.00000000	1.00000000
30	1.00000000	1.00000000
31	1.00000000	1.00000000
32	1.00000000	1.00000000
33	1.00000000	1.00000000
34	1.00000000	1.00000000
35	1.00000000	1.00000000
36	1.00000000	1.00000000
37	1.00000000	1.00000000
38	1.00000000	1.00000000
39	1.00000000	1.00000000
40	1.00000000	1.00000000

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

λ	.49	.50
41	.9999999	1.0000000
42	.9999999	1.0000000
43	.9999996	.9999999
44	.9999991	.9999997
45	.9999980	.9999994
46	.9999954	.9999985
47	.9999900	.9999967
48	.9999787	.9999927
49	.9999562	.9999843
50	.9999185	.9999674
51	.9998302	.9999343
52	.9996799	.9998714
53	.9994132	.9997552
54	.9989540	.9995469
55	.9981859	.9991843
56	.9969381	.9985713
57	.9949685	.9975641
58	.9919474	.9959562
59	.9874433	.9934612
60	.9809154	.9896974
61	.9717167	.9841773
62	.9591117	.9763043
63	.9423129	.9653837
64	.9205368	.9506496
65	.8930764	.9313111
66	.8593867	.9066173
67	.8191713	.8759371
68	.7724592	.8388462
69	.7196590	.7952098
70	.6615772	.7452492
71	.5993956	.6897789
72	.5346037	.6290400
73	.4688943	.5654750
74	.4040321	.5000000
75	.3417135	.4345750
76	.2834354	.3707960
77	.2303897	.3104211
78	.1833956	.2547508
79	.1428752	.2047902
80	.1088720	.1611538
81	.0811026	.1240629
82	.0590337	.0933827
83	.0419675	.0686889
84	.0291265	.0493504
85	.0197265	.0346163
86	.0130327	.0236957
87	.0083962	.0158227
88	.0052728	.0103026
89	.0032267	.0065388
90	.0019235	.0040438
91	.0011166	.0024359
92	.0006310	.0014287
93	.0003470	.0008157
94	.0001857	.0004531
95	.0000966	.0002448
96	.0000489	.0001286
97	.0000240	.0000657
98	.0000115	.0000326
99	.0000053	.0000157
100	.0000024	.0000073
101	.0000010	.0000033
102	.0000004	.0000015
103	.0000002	.0000006
104	.0000001	.0000003
105		.0000001

$$P(e, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 140

	.01	.02	.03	.04	.05	.06	.07	.08
1	.7740518	.9497126	.9889791	.9976824	.9994252	.9998946	.9999783	.9999956
2	.4362708	.7978341	.9385330	.9829604	.9955633	.9989887	.9997372	.9999394
3	.1854939	.5699914	.8236590	.9380580	.9803531	.9942265	.9984029	.9995798
4	.0622216	.2437086	.6512570	.8470061	.9413936	.9797130	.9935152	.9990583
5	.0170769	.1763054	.4577470	.7094796	.8670630	.9461312	.9801798	.9932621
6	.0039454	.0779134	.2853834	.5444479	.7543934	.8843977	.9512702	.9812308
7	.0007841	.0300560	.1583320	.3805622	.6130632	.7904841	.8994101	.9563378
8	.0001364	.0102434	.0786207	.2420398	.4621673	.6688816	.8202260	.9128471
9	.0000210	.0031169	.0351699	.1403124	.3221944	.5320789	.7151793	.8451493
10	.0000029	.0008548	.0142657	.0743780	.2075931	.3962463	.5921855	.7541184
11	.0000004	.0002127	.0052791	.0361910	.1237546	.2757311	.4635049	.6440890
12		.0000484	.0017922	.0162296	.0683972	.1792256	.3419942	.5240585
13		.0000101	.0005610	.0087341	.0351341	.1088999	.2375778	.4048971
14		.0000020	.0001627	.0025881	.0168193	.0619393	.1553574	.2864960
15		.0000004	.0000439	.0009320	.0075241	.0330350	.0956613	.2056007
16		.0000001	.0000110	.0003129	.0031538	.0165534	.0555550	.1349922
17			.0000026	.0000985	.0012418	.0078085	.0304491	.0839545
18			.0000006	.0000292	.0004604	.0234743	.0157762	.0494943
19			.0000001	.0000081	.0001611	.0014609	.0077386	.0276863
20				.0000021	.0000533	.0005816	.0035992	.0147111
21				.0000005	.0000147	.0002196	.0015896	.0074337
22				.0000001	.0000050	.0000786	.0006476	.0035766
23					.0000014	.0000259	.0002670	.0016404
24					.0000004	.0000087	.0001018	.0007804
25					.0000001	.0000027	.0000371	.0003003
26						.0000000	.0000129	.0001201
27						.0000002	.0000043	.0000460
28						.0000001	.0000014	.0000169
29							.0000004	.0000059
30							.0000001	.0000020
31								.0000007
32								.0000002
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$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 144

	.25	.26	.27	.28	.29	.30	.31	.32
35	.6779346	.7700489	.8441214	.8997236	.9387872	.9645368	.9804961	.9908139
36	.6063948	.7080909	.7942260	.8622307	.9124257	.9471520	.9697203	.9835246
37	.5315280	.6397603	.7362994	.8164338	.8766288	.9237634	.9545838	.9748345
38	.4559747	.5670873	.6714456	.7635082	.8368412	.8934260	.9338572	.9610009
39	.3824155	.4925018	.6013783	.7013673	.7869649	.8554447	.9067352	.9480054
40	.3125273	.4185883	.5272839	.6342582	.7299484	.8095332	.8723665	.9186649
41	.2504386	.3478211	.4546137	.5631199	.6656200	.7559132	.8302898	.8877026
42	.1952806	.2823233	.3802388	.4902466	.5960382	.6953847	.7804938	.8493817
43	.1484402	.2236994	.3152074	.4160480	.5203555	.6229251	.7149888	.7893076
44	.1099512	.1729222	.2535442	.3460344	.4532005	.5594733	.6603746	.7499886
45	.0793349	.1303479	.1991185	.2846020	.3829576	.4860645	.5886976	.6899846
46	.0557490	.0937771	.1525957	.2268722	.3166505	.4173357	.5248870	.6347905
47	.0381450	.0685795	.1140669	.1760026	.2560075	.3494624	.4517356	.5560949
48	.0254102	.0478412	.0831405	.1341766	.2022521	.2866341	.3828099	.4859376
49	.0164782	.0325093	.0590720	.0944598	.1405520	.2029409	.2761310	.3544608
50	.0104020	.0215156	.0409045	.0719069	.1175410	.1796144	.2579076	.3497509
51	.0063917	.0138676	.0275999	.0506911	.0863958	.1373628	.2047619	.2875860
52	.0038230	.0087041	.0181441	.0348371	.0619510	.1025874	.1588805	.2313724
53	.0022580	.0051999	.0116202	.0233361	.0443261	.0747501	.1204866	.1820264
54	.0012615	.0031662	.0072496	.0152348	.0295467	.0531562	.0891372	.1339646
55	.0006960	.0018349	.0044057	.0096923	.0196453	.0368750	.0644047	.1051422
56	.0003738	.0010355	.0026080	.0060084	.0127333	.0249494	.0454137	.0771353
57	.0001955	.0005690	.0015037	.0036293	.0080447	.0164619	.0322443	.0552476
58	.0001095	.0003045	.0008445	.0021159	.0049538	.0105906	.0204693	.0364514
59	.0000443	.0001587	.0004620	.0012347	.0029730	.0066427	.0137366	.0263382
60	.0000238	.0000805	.0002462	.0006642	.0017308	.0040614	.0087628	.0175369
61	.0000112	.0000398	.0001278	.0003724	.0009911	.0024210	.0054549	.0113662
62	.0000051	.0000192	.0000646	.0001975	.0005505	.0014066	.0033109	.00745107
63	.0000023	.0000090	.0000318	.0001020	.0003025	.0007315	.0016952	.0038454
64	.0000010	.0000041	.0000153	.0000514	.0001571	.0004396	.0011303	.0026121
65	.0000004	.0000018	.0000071	.0000252	.0000808	.0002365	.0006356	.0015751
66	.0000002	.0000008	.0000032	.0000120	.0000404	.0001240	.0003485	.0009019
67	.0000001	.0000003	.0000014	.0000056	.0000197	.0000633	.0001858	.0005034
68		.0000001	.0000006	.0000024	.0000094	.0000315	.0000970	.0002743
69		.0000001	.0000003	.0000011	.0000043	.0000153	.0000492	.0001453
70			.0000001	.0000005	.0000020	.0000073	.0000244	.0000751
71				.0000002	.0000009	.0000033	.0000117	.0000379
72				.0000001	.0000004	.0000015	.0000055	.0000166
73					.0000002	.0000007	.0000025	.0000082
74					.0000001	.0000003	.0000011	.0000039
75						.0000001	.0000005	.0000019
76							.0000002	.0000008
77							.0000001	.0000004
78								.0000002
79								.0000001

	.33	.34	.35	.36	.37	.38	.39	.40
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
14	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
15	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
16	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
17	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
18	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
19	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
20	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
21	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
22	.99999998	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
23	.99999995	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
24	.99999987	.99999996	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
25	.99999967	.99999990	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
26	.99999916	.99999973	.99999992	.99999998	.99999999	1.00000000	1.00000000	1.00000000
27	.99999979	.99999993	.99999998	.99999999	.99999999	.99999999	1.00000000	1.00000000
28	.99999957	.99999987	.99999996	.99999998	.99999999	.99999999	1.00000000	1.00000000
29	.99999981	.99999986	.99999996	.99999997	.99999998	.99999999	.99999999	1.00000000
30	.99999984	.99999976	.99999990	.99999996	.99999998	.99999999	.99999999	.99999999
31	.99999963	.99999985	.99999993	.99999997	.99999998	.99999999	.99999999	.99999999
32	.99999947	.99999981	.99999995	.99999997	.99999998	.99999999	.99999999	.99999999
33	.99999936	.99999983	.99999993	.99999997	.99999998	.99999999	.99999999	.99999999
34	.99999910	.99999988	.99999993	.99999995	.99999997	.99999998	.99999999	.99999999
35	.99999945	.99999977	.99999992	.99999995	.99999997	.99999998	.99999999	.99999999
36	.99999918	.99999985	.99999992	.99999994	.99999996	.99999997	.99999998	.99999999
37	.99999930	.99999982	.99999991	.99999993	.99999995	.99999996	.99999997	.99999998
38	.99999915	.99999983	.99999991	.99999993	.99999995	.99999996	.99999997	.99999998
39	.99999974	.99999985	.99999991	.99999993	.99999995	.99999996	.99999997	.99999998
40	.99999926	.99999986	.99999991	.99999993	.99999995	.99999996	.99999997	.99999998
41	.99999925	.99999985	.99999991	.99999993	.99999995	.99999996	.99999997	.99999998
42	.99999907	.99999984	.99999991	.99999993	.99999995	.99999996	.99999997	.99999998
43	.99999904	.99999983	.99999991	.99999993	.99999995	.99999996	.99999997	.99999998
44	.99999945	.99999985	.99999991	.99999993	.99999995	.99999996	.99999997	.99999998
45	.99999961	.99999984	.99999991	.99999993	.99999995	.99999996	.99999997	.99999998
46	.99999976	.99999984	.99999991	.99999993	.99999995	.99999996	.99999997	.99999998
47	.99999978	.99999984	.99999991	.99999993	.99999995	.99999996	.99999997	.99999998

$$E(n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 140

p	.33	.34	.35	.36	.37	.38	.39	.40
48	.5888959	.6851086	.7694275	.8388444	.8926074	.9318288	.9580069	.9761804
49	.5197362	.6206791	.7131538	.7926812	.8570081	.9059767	.9411144	.9648993
50	.4502185	.5529424	.6513146	.7397048	.8143397	.8736418	.9180996	.9493603
51	.3824231	.4838510	.5853045	.6806936	.7617225	.8344003	.8888063	.9288490
52	.3182585	.4154575	.5171672	.6169093	.7007274	.7881850	.8527046	.9028730
53	.2593059	.3497343	.4486473	.5459818	.6473824	.7333471	.8100871	.8698964
54	.2067118	.2884078	.3818179	.4817916	.5821241	.6766883	.7605021	.8304379
55	.1611389	.2328284	.3185108	.4143117	.5146988	.6134391	.7047302	.7841394
56	.1227761	.1838941	.2602526	.3494389	.4470193	.5471880	.6437884	.7314700
57	.0913967	.1420298	.2081526	.2886379	.3810094	.4797479	.5790824	.6730318
58	.0664510	.1072208	.1628744	.2338186	.3184369	.4130360	.5123106	.6082738
59	.0471735	.0790863	.1246221	.1852617	.2607791	.3488841	.4453313	.5445885
60	.0326899	.0569774	.0932024	.1433973	.2091244	.2889062	.3800083	.4777093
61	.0221081	.0400832	.0681069	.1088337	.1641248	.2343778	.3180586	.4116330
62	.0145893	.0275279	.0486128	.0806236	.1259985	.1861645	.2603808	.3400840
63	.0091928	.0184520	.0338834	.0583374	.0945791	.1446991	.2096589	.2866349
64	.0058988	.0120696	.0230566	.0412599	.0693879	.1100063	.1644903	.2345331
65	.0036133	.0077029	.0153139	.0284869	.0497393	.0817663	.1269315	.1866304
66	.0021585	.0047938	.0099261	.0192019	.0348265	.0593985	.0953440	.1483405
67	.0012574	.0029125	.0062777	.0124339	.0238183	.0421579	.0706307	.1107404
68	.0007143	.0017251	.0038734	.0081122	.0158954	.0292854	.0505608	.0823593
69	.0003956	.0009964	.0021313	.0050825	.0103549	.0197837	.0355821	.0601106
70	.0002134	.0005312	.0011685	.0031666	.0065856	.0130743	.0243744	.0427824
71	.0001124	.0003082	.0007834	.0018523	.0040859	.0084334	.0163308	.0297448
72	.0000577	.0001650	.0004373	.0010771	.0024731	.0053086	.0106811	.0201961
73	.0000288	.0000861	.0002380	.0006109	.0014602	.0032603	.0066818	.0133883
74	.0000141	.0000438	.0001263	.0003378	.0008408	.0019533	.0042470	.0086643
75	.0000067	.0000217	.0000653	.0001821	.0004721	.0011415	.0025809	.0054706
76	.0000031	.0000105	.0000329	.0000957	.0002585	.0006505	.0015299	.0033704
77	.0000014	.0000049	.0000162	.0000490	.0001380	.0003615	.0008844	.0020258
78	.0000006	.0000023	.0000078	.0000245	.0000718	.0001958	.0004986	.0011875
79	.0000003	.0000010	.0000036	.0000119	.0000364	.0001034	.0002740	.0006788
80	.0000001	.0000004	.0000016	.0000057	.0000180	.0000532	.0001468	.0003703
81		.0000002	.0000007	.0000026	.0000087	.0000267	.0000767	.0002051
82		.0000001	.0000003	.0000012	.0000041	.0000131	.0000390	.0001088
83			.0000001	.0000005	.0000019	.0000063	.0000193	.0000568
84			.0000001	.0000002	.0000008	.0000029	.0000093	.0000288
85				.0000001	.0000004	.0000013	.0000044	.0000138
86					.0000002	.0000006	.0000020	.0000064
87					.0000001	.0000002	.0000009	.0000031
88						.0000001	.0000004	.0000014
89							.0000008	.0000026
90							.0000001	.0000003
91								.0000001

p	.41	.42	.43	.44	.45	.46	.47	.48
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
14	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
15	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
16	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
17	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
18	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
19	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
20	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
21	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
22	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
23	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
24	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
25	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
26	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
27	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
28	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
29	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
30	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
31	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
32	.9999998	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
33	.9999995	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
34	.9999998	.9999996	.9999999	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
35	.9999970	.9999991	.9999997	.9999999	1.0000000	1.0000000	1.0000000	1.0000000
36	.9999930	.9999977	.9999993	.9999998	.9999999	1.0000000	1.0000000	1.0000000
37	.9999844	.9999947	.9999983	.9999995	.9999998	1.0000000	1.0000000	1.0000000
38	.9999662	.9999880	.9999960	.9999987	.9999996	.9999999	1.0000000	1.0000000
39	.9999292	.9999719	.9999909	.9999970	.9999987	.9999997	.9999999	1.0000000
40	.9998568	.9999432	.9999801	.9999931	.9999978	.9999993	.9999999	.9999999
41	.9997196	.9998884	.9999578	.9999849	.9999949	.9999983	.9999995	.9999999
42	.9994685	.9997801	.9999136	.9999676	.9999886	.9999962	.9999988	.9999999
43	.9990240	.9995804	.9998287	.9999336	.9999756	.9999915	.9999978	.9999991
44	.9988626	.9992318	.9996708	.9998475	.9999494	.9999817	.9999937	.9999980
45	.9969998	.9916076	.9993664	.9997434	.9999682	.99999617	.9999983	.9999992
46	.9949718	.9975764	.9988907	.9995181	.9999014	.9999924	.9999973	.9999999
47	.9918162	.9959044	.9980534	.9991217	.9996340	.9999474	.9999943	.9999998
48	.9870571	.9932768	.9966825	.9984458	.9993090	.9997087	.9999833	.9999998

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$$P(n, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 140

Δp	.41	.42	.43	.44	.45	.46	.47	.48
49	.9800904	.9802730	.9845064	.9973883	.9987668	.9994601	.9997759	.9999119
50	.9703296	.9833561	.9911568	.9955365	.9978615	.9990280	.9995611	.9998890
51	.9566508	.9748725	.9861520	.9927488	.9963948	.9983991	.9992391	.9997773
52	.9385186	.9630677	.9782980	.9885401	.9940888	.9971020	.9986322	.9994086
53	.9150141	.9471219	.9686900	.9833715	.9905694	.9952108	.9976920	.9989748
54	.8854287	.9262066	.9547413	.9735925	.9853538	.9923849	.9961438	.9981710
55	.8492594	.8995618	.9362298	.9614574	.9778463	.9879010	.9937270	.9969151
56	.8063022	.8665854	.9123614	.9451618	.9673484	.9815186	.9900649	.9949385
57	.7567271	.8269283	.8849592	.9336985	.9530841	.9724894	.9846718	.9918988
58	.7011229	.7805783	.8460502	.8969330	.9342470	.9600731	.9789325	.9913644
59	.6404977	.7279178	.8029563	.8636911	.9100659	.9434830	.9669183	.9808059
60	.5762325	.6697478	.7533656	.8238491	.8798861	.9219886	.9516837	.9713711
61	.5099886	.6072651	.6978734	.7774148	.8432587	.8944794	.9325726	.9580845
62	.4435790	.5419922	.6374814	.7247807	.8000365	.8618008	.9081836	.9420888
63	.3788214	.4756666	.5735521	.6667504	.7503918	.8211811	.8777000	.9209779
64	.3173915	.4101033	.5077179	.6045094	.6949566	.7746451	.8408710	.8929788
65	.2606937	.3470481	.4417374	.5395591	.6347161	.7219959	.7974949	.8591086
66	.2097804	.2880404	.3774526	.4736097	.5710222	.6640367	.7477854	.8169107
67	.1652850	.2343046	.3164468	.4084454	.5054860	.6019469	.6923490	.7728543
68	.1274420	.1866808	.2601214	.3457820	.4398608	.5382143	.6358827	.7284449
69	.0961169	.1456016	.2095070	.2871338	.3759020	.4713897	.5686267	.6615888
70	.0706702	.1111124	.1523372	.2037069	.2651300	.3366560	.4152810	.5009316
71	.0510845	.0829264	.1275468	.1863315	.2592078	.3442880	.4378824	.5349443
72	.0359737	.0605035	.0963104	.1454379	.2088517	.2859217	.3741697	.4694171
73	.0247433	.0431386	.0711097	.1107660	.1647901	.2327495	.3137461	.4047300
74	.0161066	.0300473	.0513174	.0829670	.1271802	.1855933	.2579609	.3425649
75	.0108963	.0204393	.0361846	.0605044	.0961353	.1440803	.2078224	.2844063
76	.0069728	.0135745	.0249208	.0432319	.0710107	.1106613	.1639529	.2314378
77	.0043540	.0084797	.0167590	.0301360	.0518656	.0826685	.1268853	.1844728
78	.0026523	.0051666	.0100016	.0205145	.0361554	.0603603	.0958998	.1439360
79	.0015750	.0031355	.0070401	.0136332	.0249092	.0430672	.0705881	.1098755
80	.0009130	.0020681	.0044055	.0088424	.0167531	.0300014	.0509347	.0820169
81	.0005158	.0012141	.0026860	.0053958	.0109974	.0204232	.0359037	.0598371
82	.0002840	.0006949	.0013970	.0034543	.0070440	.0135655	.0247118	.0426494
83	.0001524	.0003877	.0007258	.0020794	.0044011	.0087920	.0166033	.0296861
84	.0000727	.0002100	.0005331	.0012305	.0026817	.0055564	.0108853	.0201708
85	.0000406	.0001117	.0002881	.0006982	.0015931	.0034270	.0069617	.0133742
86	.0000202	.0000577	.0001546	.0003893	.0009224	.0020599	.0043418	.0086504
87	.0000107	.0000290	.0000808	.0002114	.0005305	.0012068	.0026399	.0054541
88	.0000044	.0000142	.0000411	.0001119	.0002861	.0006809	.0015644	.0033348
89	.0000021	.0000068	.0000204	.0000576	.0001532	.0003831	.0009032	.0020103
90	.0000009	.0000031	.0000098	.0000220	.0000578	.0001295	.0003080	.0007136
91	.0000004	.0000014	.0000046	.0000141	.0000405	.0001094	.0002782	.0006673
92	.0000002	.0000006	.0000021	.0000067	.0000200	.0000561	.0001483	.0003694
93	.0000001	.0000003	.0000009	.0000031	.0000096	.0000280	.0000769	.0001991
94		.0000001	.0000004	.0000014	.0000045	.0000136	.0000388	.0001044
95			.0000002	.0000006	.0000020	.0000064	.0000191	.0000538
96			.0000001	.0000003	.0000009	.0000030	.0000091	.0000264
97				.0000001	.0000004	.0000013	.0000042	.0000127
98					.0000002	.0000006	.0000019	.0000060
99					.0000001	.0000002	.0000008	.0000027
100						.0000001	.0000004	.0000012
101							.0000001	.0000005
102							.0000001	.0000002
103								.0000001

Δp	.49	.50
1	1.0000000	1.0000000
2	1.0000000	1.0000000
3	1.0000000	1.0000000
4	1.0000000	1.0000000
5	1.0000000	1.0000000
6	1.0000000	1.0000000
7	1.0000000	1.0000000
8	1.0000000	1.0000000
9	1.0000000	1.0000000
10	1.0000000	1.0000000
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12	1.0000000	1.0000000
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16	1.0000000	1.0000000
17	1.0000000	1.0000000
18	1.0000000	1.0000000
19	1.0000000	1.0000000
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29	1.0000000	1.0000000
30	1.0000000	1.0000000
31	1.0000000	1.0000000
32	1.0000000	1.0000000
33	1.0000000	1.0000000
34	1.0000000	1.0000000
35	1.0000000	1.0000000
36	1.0000000	1.0000000
37	1.0000000	1.0000000
38	1.0000000	1.0000000

$$P(n, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 148

np	.49	.50
39	1.00000000	1.00000000
40	1.00000000	1.00000000
41	1.00000000	1.00000000
42	.99999999	1.00000000
43	.99999997	.99999999
44	.99999994	.99999998
45	.99999988	.99999996
46	.99999967	.99999990
47	.99999936	.99999976
48	.99999882	.99999947
49	.99999792	.99999885
50	.99999639	.99999759
51	.99987005	.99993509
52	.99975336	.99980528
53	.99954339	.99961333
54	.99917900	.99926510
55	.99856233	.99903656
56	.99754495	.99887778
57	.99593336	.99806777
58	.99342788	.9967602
59	.98965503	.99470867
60	.9841141	.9915793
61	.9762241	.9869374
62	.96532001	.9802408
63	.9505443	.9708440
64	.9312071	.9580167
65	.9065320	.9409604
66	.8758947	.9169642
67	.8388768	.8912772
68	.7933481	.8573917
69	.7455311	.8170280
70	.6900373	.7702295
71	.6298646	.7174140
72	.5663517	.6593915
73	.5010910	.5973393
74	.4358146	.5329137
75	.3722494	.4672625
76	.3119916	.4026605
77	.2563021	.3406085
78	.2064287	.2823520
79	.1647302	.2297705
80	.1255336	.1829720
81	.0947096	.1426083
82	.0698475	.1087228
83	.0503299	.0810358
84	.0354186	.0590106
85	.0243328	.0419833
86	.0163127	.0291560
87	.0104681	.0197492
88	.0068033	.0110426
89	.0042893	.0064207
90	.0028621	.0038913
91	.0015120	.0023398
92	.0008620	.0014323
93	.0004862	.0008228
94	.0002647	.0004344
95	.0001403	.0002490
96	.0000723	.0001265
97	.0000362	.0000672
98	.0000174	.0000341
99	.0000083	.0000175
100	.0000036	.0000088
101	.0000017	.0000043
102	.0000007	.0000021
103	.0000003	.0000010
104	.0000001	.0000005
105		.0000002
106		.0000001

$$P(x, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 149

x	.01	.02	.03	.04	.05	.06	.07	.08
1	.7763113	.9507173	.9903097	.9977175	.9995205	.9999000	.9999799	.9999946
2	.4396406	.8000619	.9400464	.9835469	.9957592	.9989585	.9997540	.9999439
3	.1680017	.5745401	.8272992	.9390541	.9811134	.9945069	.9984963	.9994084
4	.0634492	.3400142	.6564351	.8506481	.9433416	.9805638	.9938573	.9981800
5	.0175283	.1796535	.4635583	.7140807	.8707795	.9481461	.9811187	.9934458
6	.0040767	.0798019	.2905544	.5510492	.7600269	.8881017	.9532938	.9822117
7	.0008157	.0310132	.1621435	.3071177	.5001808	.7261189	.9030404	.9583493
8	.0001430	.0106396	.0810131	.0475007	.0277121	.0161778	.0082569	.0045600
9	.0000288	.0035574	.0364734	.0243015	.0139191	.0074027	.0039535	.0020331
10	.0000051	.0006998	.0148928	.0270154	.0332230	.0403663	.0460795	.0514009
11	.0000004	.0002556	.0055407	.0177105	.0379468	.0629620	.0875186	.0119991
12		.0000517	.0010268	.0170800	.0711650	.1850160	.3508000	.5336410
13		.0000109	.0003980	.0071139	.0367973	.1131194	.2448869	.4144300
14		.0000021	.0001746	.0027985	.0177350	.0647569	.1611130	.3031681
15		.0000004	.0000474	.0007985	.0079889	.0347692	.0998888	.2186794
16		.0000001	.0000120	.0003377	.0033783	.0175403	.0533639	.1406409
17			.0000029	.0001071	.0013374	.0083338	.0382065	.0880376
18			.0000006	.0000320	.0004995	.0037344	.0168033	.0522511
19			.0000001	.0000090	.0001760	.0015818	.0083012	.0289308
20				.0000024	.0000587	.0006344	.0038889	.0157491
21				.0000006	.0000165	.0002414	.0017303	.0080159
22				.0000001	.0000056	.0000873	.0007328	.0038851
23					.0000016	.0000300	.0002951	.0017953
24					.0000004	.0000098	.0001134	.0007910
25					.0000001	.0000031	.0000416	.0003337
26						.0000009	.0000146	.0001345
27						.0000001	.0000049	.0000519
28							.0000016	.0000191
29							.0000008	.0000068
30							.0000001	.0000008
31								.0000000
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$$E(r, n, p) = \sum_{r=0}^n \binom{n}{r} r^r (1-p)^{n-r}$$

n = 142

	.17	.18	.19	.20	.21	.22	.23	.24
7	.9992788	.9992927	.9993069	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	.9992927	.9993069	.9993212	.9993356	.9993500	.9993644	.9993788	.9993932
9	.9993069	.9993212	.9993356	.9993500	.9993644	.9993788	.9993932	.9994076
10	.9993212	.9993356	.9993500	.9993644	.9993788	.9993932	.9994076	.9994220
11	.9993356	.9993500	.9993644	.9993788	.9993932	.9994076	.9994220	1.0000000
12	.9993500	.9993644	.9993788	.9993932	.9994076	.9994220	.9994364	.9994508
13	.9993644	.9993788	.9993932	.9994076	.9994220	.9994364	.9994508	.9994652
14	.9993788	.9993932	.9994076	.9994220	.9994364	.9994508	.9994652	.9994796
15	.9993932	.9994076	.9994220	.9994364	.9994508	.9994652	.9994796	.9994940
16	.9994076	.9994220	.9994364	.9994508	.9994652	.9994796	.9994940	.9995084
17	.9994220	.9994364	.9994508	.9994652	.9994796	.9994940	.9995084	.9995228
18	.9994364	.9994508	.9994652	.9994796	.9994940	.9995084	.9995228	.9995372
19	.9994508	.9994652	.9994796	.9994940	.9995084	.9995228	.9995372	.9995516
20	.9994652	.9994796	.9994940	.9995084	.9995228	.9995372	.9995516	.9995660
21	.9994796	.9994940	.9995084	.9995228	.9995372	.9995516	.9995660	.9995804
22	.9994940	.9995084	.9995228	.9995372	.9995516	.9995660	.9995804	.9995948
23	.9995084	.9995228	.9995372	.9995516	.9995660	.9995804	.9995948	.9996092
24	.9995228	.9995372	.9995516	.9995660	.9995804	.9995948	.9996092	.9996236
25	.9995372	.9995516	.9995660	.9995804	.9995948	.9996092	.9996236	.9996380
26	.9995516	.9995660	.9995804	.9995948	.9996092	.9996236	.9996380	.9996524
27	.9995660	.9995804	.9995948	.9996092	.9996236	.9996380	.9996524	.9996668
28	.9995804	.9995948	.9996092	.9996236	.9996380	.9996524	.9996668	.9996812
29	.9995948	.9996092	.9996236	.9996380	.9996524	.9996668	.9996812	.9996956
30	.9996092	.9996236	.9996380	.9996524	.9996668	.9996812	.9996956	.9997100
31	.9996236	.9996380	.9996524	.9996668	.9996812	.9996956	.9997100	.9997244
32	.9996380	.9996524	.9996668	.9996812	.9996956	.9997100	.9997244	.9997388
33	.9996524	.9996668	.9996812	.9996956	.9997100	.9997244	.9997388	.9997532
34	.9996668	.9996812	.9996956	.9997100	.9997244	.9997388	.9997532	.9997676
35	.9996812	.9996956	.9997100	.9997244	.9997388	.9997532	.9997676	.9997820
36	.9996956	.9997100	.9997244	.9997388	.9997532	.9997676	.9997820	.9997964
37	.9997100	.9997244	.9997388	.9997532	.9997676	.9997820	.9997964	.9998108
38	.9997244	.9997388	.9997532	.9997676	.9997820	.9997964	.9998108	.9998252
39	.9997388	.9997532	.9997676	.9997820	.9997964	.9998108	.9998252	.9998396
40	.9997532	.9997676	.9997820	.9997964	.9998108	.9998252	.9998396	.9998540
41	.9997676	.9997820	.9997964	.9998108	.9998252	.9998396	.9998540	.9998684
42	.9997820	.9997964	.9998108	.9998252	.9998396	.9998540	.9998684	.9998828
43	.9997964	.9998108	.9998252	.9998396	.9998540	.9998684	.9998828	.9998972
44	.9998108	.9998252	.9998396	.9998540	.9998684	.9998828	.9998972	.9999116
45	.9998252	.9998396	.9998540	.9998684	.9998828	.9998972	.9999116	.9999260
46	.9998396	.9998540	.9998684	.9998828	.9998972	.9999116	.9999260	.9999404
47	.9998540	.9998684	.9998828	.9998972	.9999116	.9999260	.9999404	.9999548
48	.9998684	.9998828	.9998972	.9999116	.9999260	.9999404	.9999548	.9999692
49	.9998828	.9998972	.9999116	.9999260	.9999404	.9999548	.9999692	.9999836
50	.9998972	.9999116	.9999260	.9999404	.9999548	.9999692	.9999836	.9999980
51	.9999116	.9999260	.9999404	.9999548	.9999692	.9999836	.9999980	1.0000000
52	.9999260	.9999404	.9999548	.9999692	.9999836	.9999980	1.0000000	.9999980
53	.9999404	.9999548	.9999692	.9999836	.9999980	1.0000000	.9999980	.9999980
54	.9999548	.9999692	.9999836	.9999980	1.0000000	.9999980	.9999980	.9999980
55	.9999692	.9999836	.9999980	1.0000000	.9999980	.9999980	.9999980	.9999980
56	.9999836	.9999980	1.0000000	.9999980	.9999980	.9999980	.9999980	.9999980
57	.9999980	1.0000000	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980
58	1.0000000	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980
59	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980
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75	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980
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86	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980
87	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980
88	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980
89	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980
90	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980
91	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980
92	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980
93	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980
94	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980
95	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980
96	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980
97	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980
98	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980
99	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980
100	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980

$$P(n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 149

	.45	.46	.47	.48	.49	.50	.51	.52
35	.5944382	.7841833	.8357041	.8800114	.9145335	.9368730	.9507709	.9611869
36	.6008848	.7848000	.8374977	.8827887	.9180706	.9395675	.9534608	.9638391
37	.6073404	.7854248	.8381225	.8834134	.9187005	.9401974	.9540907	.9644690
38	.6138053	.7860496	.8387473	.8840382	.9193253	.9408222	.9547155	.9650938
39	.6202702	.7866744	.8393721	.8846630	.9199501	.9414470	.9553403	.9657186
40	.6267350	.7872992	.8400000	.8852878	.9205749	.9420718	.9559651	.9663434
41	.6332000	.7879240	.8406248	.8859126	.9212000	.9426966	.9565900	.9669682
42	.6396648	.7885488	.8412496	.8865374	.9218250	.9433214	.9572148	.9675930
43	.6461296	.7891736	.8418744	.8871622	.9224500	.9439462	.9578396	.9682178
44	.6525944	.7897984	.8425000	.8877870	.9230750	.9445710	.9584644	.9688426
45	.6590592	.7904232	.8431248	.8884118	.9237000	.9451958	.9590892	.9694674
46	.6655240	.7910480	.8437500	.8890366	.9243250	.9458206	.9597140	.9700922
47	.6719888	.7916728	.8443748	.8896614	.9249500	.9464454	.9603388	.9707170
48	.6784536	.7922976	.8450000	.8902862	.9255750	.9470702	.9609636	.9713418
49	.6849184	.7929224	.8456248	.8909110	.9262000	.9476950	.9615884	.9719666
50	.6913832	.7935472	.8462500	.8915358	.9268250	.9483198	.9622132	.9725914
51	.6978480	.7941720	.8468748	.8921606	.9274500	.9489446	.9628380	.9732162
52	.7043128	.7947968	.8475000	.8927854	.9280750	.9495694	.9634628	.9738410
53	.7107776	.7954216	.8481248	.8934102	.9287000	.9501942	.9640876	.9744658
54	.7172424	.7960464	.8487500	.8940350	.9293250	.9508190	.9647124	.9750906
55	.7237072	.7966712	.8493748	.8946600	.9299500	.9514438	.9653372	.9757154
56	.7301720	.7972960	.8500000	.8952848	.9305750	.9520686	.9659620	.9763402
57	.7366368	.7979208	.8506248	.8959096	.9312000	.9526934	.9665868	.9769650
58	.7431016	.7985456	.8512500	.8965344	.9318250	.9533182	.9672116	.9775898
59	.7495664	.7991704	.8518748	.8971592	.9324500	.9539430	.9678364	.9782146
60	.7560312	.7997952	.8525000	.8977840	.9330750	.9545678	.9684612	.9788394
61	.7624960	.8004200	.8531248	.8984088	.9337000	.9551926	.9690860	.9794642
62	.7689608	.8010448	.8537500	.8990336	.9343250	.9558174	.9697108	.9800890
63	.7754256	.8016696	.8543748	.8996584	.9349500	.9564422	.9703356	.9807138
64	.7818904	.8022944	.8550000	.9002832	.9355750	.9570670	.9709604	.9813386
65	.7883552	.8029192	.8556248	.9009080	.9362000	.9576918	.9715852	.9819634
66	.7948200	.8035440	.8562500	.9015328	.9368250	.9583166	.9722100	.9825882
67	.8012848	.8041688	.8568748	.9021576	.9374500	.9589414	.9728348	.9832130
68	.8077496	.8047936	.8575000	.9027824	.9380750	.9595662	.9734596	.9838378
69	.8142144	.8054184	.8581248	.9034072	.9387000	.9601910	.9740844	.9844626
70	.8206792	.8060432	.8587500	.9040320	.9393250	.9608158	.9747092	.9850874
71	.8271440	.8066680	.8593748	.9046568	.9399500	.9614406	.9753340	.9857122
72	.8336088	.8072928	.8600000	.9052816	.9405750	.9620654	.9759588	.9863370
73	.8400736	.8079176	.8606248	.9059064	.9412000	.9626902	.9765836	.9869618
74	.8465384	.8085424	.8612500	.9065312	.9418250	.9633150	.9772084	.9875866
75	.8529932	.8091672	.8618748	.9071560	.9424500	.9639398	.9778332	.9882114
76	.8594580	.8097920	.8625000	.9077808	.9430750	.9645646	.9784580	.9888362
77	.8659228	.8104168	.8631248	.9084056	.9437000	.9651894	.9790828	.9894610
78	.8723876	.8110416	.8637500	.9090304	.9443250	.9658142	.9797076	.9900858
79	.8788524	.8116664	.8643748	.9096552	.9449500	.9664390	.9803324	.9907106

	.53	.54	.55	.56	.57	.58	.59	.60
1	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
2	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
3	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
4	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
5	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
6	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
7	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
8	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
9	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
10	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
11	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
12	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
14	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
15	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
16	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
17	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
18	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
19	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
20	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
21	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
22	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999	.9999999
23	.9999998	.9999998	.9999998	.9999998	.9999998	.9999998	.9999998	.9999998
24	.9999997	.9999997	.9999997	.9999997	.9999997	.9999997	.9999997	.9999997
25	.9999996	.9999996	.9999996	.9999996	.9999996	.9999996	.9999996	.9999996
26	.9999995	.9999995	.9999995	.9999995	.9999995	.9999995	.9999995	.9999995
27	.9999994	.9999994	.9999994	.9999994	.9999994	.9999994	.9999994	.9999994
28	.9999993	.9999993	.9999993	.9999993	.9999993	.9999993	.9999993	.9999993
29	.9999992	.9999992	.9999992	.9999992	.9999992	.9999992	.9999992	.9999992
30	.9999991	.9999991	.9999991	.9999991	.9999991	.9999991	.9999991	.9999991
31	.9999990	.9999990	.9999990	.9999990	.9999990	.9999990	.9999990	.9999990
32	.9999989	.9999989	.9999989	.9999989	.9999989	.9999989	.9999989	.9999989
33	.9999988	.9999988	.9999988	.9999988	.9999988	.9999988	.9999988	.9999988
34	.9999987	.9999987	.9999987	.9999987	.9999987	.9999987	.9999987	.9999987
35	.9999986	.9999986	.9999986	.9999986	.9999986	.9999986	.9999986	.9999986
36	.9999985	.9999985	.9999985	.9999985	.9999985	.9999985	.9999985	.9999985
37	.9999984	.9999984	.9999984	.9999984	.9999984	.9999984	.9999984	.9999984
38	.9999983	.9999983	.9999983	.9999983	.9999983	.9999983	.9999983	.9999983
39	.9999982	.9999982	.9999982	.9999982	.9999982	.9999982	.9999982	.9999982
40	.9999981	.9999981	.9999981	.9999981	.9999981	.9999981	.9999981	.9999981
41	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980	.9999980
42	.9999979	.9999979	.9999979	.9999979	.9999979	.9999979	.9999979	.9999979
43	.9999978	.9999978	.9999978	.9999978	.9999978	.9999978	.9999978	.9999978
44	.9999977	.9999977	.9999977	.9999977	.9999977	.9999977	.9999977	.9999977
45	.9999976	.9999976	.9999976	.9999976	.9999976	.9999976	.9999976	.9999976
46	.9999975	.9999975	.9999975	.9999975	.9999975	.9999975	.9999975	.9999975
47	.9999974	.9999974	.9999974	.9999974	.9999974	.9999974	.9999974	.9999974
48	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973	.9999973
49	.9999972	.9999972	.9999972	.9999972	.9999972	.9999972	.9999972	.9999972
50	.9999971	.9999971	.9999971	.9999971	.9999971	.9999971	.9999971	.9999971
51	.9999970	.9999970	.9999970	.9999970	.9999970	.9999970	.9999970	.9999970
52	.9999969	.9999969	.9999969	.9999969	.9999969	.9999969	.9999969	.9999969
53	.9999968	.9999968	.9999968	.9999968	.9999968	.9999968	.9999968	.9999968
54	.9999967	.9999967	.9999967	.9999967	.9999967	.9999967	.9999967	.9999967
55	.9999966	.9999966	.9999966	.9999966	.9999966	.9999966	.9999966	.9999966
56	.9999965	.9999965	.9999965	.9999965	.9999965	.9999965	.9999965	.9999965
57	.9999964	.9999964	.9999964	.9999964	.9999964	.9999964	.9999964	.9999964
58	.9999963	.9999963	.9999963	.9999963	.9999963	.9999963	.9999963	.9999963
59	.9999962	.9999962	.9999962	.9999962	.9999962	.9999962	.9999962	.9999962
60	.9999961	.9999961	.9999961	.9999961	.9999961	.9999961	.9999961	.9999961
61	.9999960	.9999960	.9999960	.9999960	.9999960	.9999960	.9999960	.9999960
62	.9999959	.9999959	.9999959	.9999959	.9999959	.9999959	.9999959	.9999959
63	.9999958	.9999958	.9999958	.9999958	.9999958	.9999958	.9999958	.9999958
64	.9999957	.9999957	.999995					

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 149

	.33	.34	.35	.36	.37	.38	.39	.40
48	.6109174	.7053176	.7668110	.8328829	.9032660	.9394454	.9639360	.9795771
49	.5425589	.6425851	.7328496	.8099050	.8701798	.9158003	.9480148	.9694677
50	.4731593	.5759729	.6729583	.7587792	.8301270	.8859287	.9270327	.9555739
51	.4047956	.5073421	.6084600	.7019376	.7830808	.8493119	.9002035	.9370535
52	.3394338	.4387113	.5410433	.6398716	.7294456	.8057469	.8669063	.9130814
53	.2787603	.3720802	.4726622	.5740757	.6700800	.7554255	.8267859	.8829670
54	.2240579	.3092548	.4052081	.5063401	.6062697	.6989786	.7798403	.8462213
55	.1761780	.2517254	.3406683	.4388044	.5396458	.6374739	.7264813	.8026708
56	.1354359	.2005317	.2806417	.3727831	.4720605	.5723616	.6675557	.7525218
57	.1017519	.1562636	.2263869	.3106543	.4054331	.5053740	.6043177	.6964086
58	.0746831	.1190559	.1778218	.2536255	.3415887	.4383865	.5381516	.6353607
59	.0535351	.0886520	.1380104	.2027421	.2821125	.3732618	.4714532	.5708106
60	.0374695	.0644944	.1041993	.1585965	.2282367	.3116978	.4054843	.5044371
61	.0256001	.0458822	.0788903	.1213486	.1807746	.2550986	.3422109	.4380636
62	.0170705	.0317967	.0554357	.0907794	.1401052	.2044856	.2832042	.3735036
63	.0111076	.0215378	.0390387	.0663733	.1062037	.1604559	.2296508	.3124145
64	.0070518	.0142396	.0268460	.0474150	.0787083	.1231897	.1823604	.2561776
65	.0043675	.0091876	.0180239	.0330852	.0570093	.0924976	.1417471	.2057915
66	.0026386	.0057842	.0118119	.0225445	.0403443	.0678893	.1077851	.1618384
67	.0015548	.0035528	.0075547	.0149984	.0278876	.0487093	.0801499	.1246004
68	.0008935	.0021289	.0047149	.0097400	.0188247	.0341398	.0582621	.0938218
69	.0005007	.0012482	.0028710	.0061732	.0124062	.0233716	.0413872	.0697033
70	.0002736	.0007092	.0017055	.0038179	.0079610	.0156239	.0287220	.0497138
71	.0001458	.0003942	.0009882	.0023038	.0050108	.0101970	.0194678	.0349598
72	.0000757	.0002137	.0005585	.0013562	.0030699	.0064960	.0128845	.0240156
73	.0000384	.0001130	.0003078	.0007787	.0018320	.0040385	.0083248	.0161114
74	.0000208	.0000582	.0001554	.0004164	.0010700	.0024498	.0050513	.0100813
75	.0000091	.0000292	.0000867	.0002362	.0006085	.0014500	.0032307	.0067477
76	.0000043	.0000143	.0000443	.0001268	.0003375	.0008371	.0019398	.0042106
77	.0000020	.0000068	.0000221	.0000658	.0001826	.0004713	.0011362	.0025637
78	.0000009	.0000032	.0000107	.0000333	.0000963	.0002588	.0006491	.0015228
79	.0000004	.0000016	.0000051	.0000154	.0000495	.0001385	.0003616	.0008823
80	.0000002	.0000006	.0000023	.0000079	.0000248	.0000723	.0001964	.0004985
81	.0000001	.0000003	.0000010	.0000037	.0000121	.0000368	.0001040	.0002747
82		.0000001	.0000005	.0000017	.0000058	.0000182	.0000537	.0001475
83			.0000002	.0000008	.0000027	.0000088	.0000270	.0000772
84			.0000001	.0000003	.0000012	.0000041	.0000132	.0000394
85				.0000001	.0000005	.0000019	.0000063	.0000196
86				.0000001	.0000002	.0000008	.0000029	.0000095
87					.0000001	.0000004	.0000013	.0000045
88						.0000002	.0000006	.0000021
89						.0000001	.0000003	.0000009
90							.0000001	.0000004
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$$H(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 149

	.41	.42	.43	.44	.45	.46	.47	.48
40	.9890083	.9843804	.9772720	.9687432	.9594508	.9497725	.9399107	.9299468
41	.9829515	.9760546	.9654421	.9528800	.9390108	.9245745	.9099265	.8953331
42	.9742758	.9651412	.9525968	.9363249	.9182688	.8992260	.8799727	.8608688
43	.9622181	.9484356	.9303038	.9079754	.8815488	.8518344	.8199398	.7875002
44	.9469528	.9280257	.9001172	.8639119	.8201267	.7698548	.7149302	.6583377
45	.9246509	.8953191	.8570794	.8098057	.7551532	.6950822	.6314552	.5675179
46	.8975387	.8549910	.8007392	.7367852	.6657008	.5893305	.5098711	.4295433
47	.8640888	.8075252	.7411894	.6667968	.5851224	.4989917	.4105626	.3225183
48	.8219147	.7480454	.6626246	.5653319	.4580725	.3444545	.2278661	.1125940
49	.7770129	.6835844	.5753171	.4532544	.3205030	.1816428	.0412066	.0000000
50	.7239206	.6007454	.4617061	.3087978	.1427237	.0000000	.0000000	.0000000
51	.6653540	.5003551	.3214867	.0783175	.0000000	.0000000	.0000000	.0000000
52	.6028812	.3941790	.1746896	.0413796	.0000000	.0000000	.0000000	.0000000
53	.5371496	.3335078	.17217350	.07978455	.0597410	.0072213	.0000000	.0000000
54	.4708069	.2694068	.1450000	.07479394	.0394810	.0194006	.0093146	.0046494
55	.4053720	.2035234	.1004171	.0422837	.0227274	.0119991	.0059991	.0029991
56	.3428778	.1763999	.0860266	.0418994	.0219909	.0109957	.0054978	.0027489
57	.2839410	.1375512	.0701204	.0361372	.0182139	.0091069	.0045534	.0022767
58	.2306557	.1128236	.051037	.026275	.0131375	.0065685	.0032842	.0016421
59	.1835281	.0868736	.0426793	.0213396	.0106698	.0053349	.0026674	.0013337
60	.1429577	.0668828	.0334113	.0167056	.0083528	.0041764	.0020882	.0010441
61	.1099602	.0488549	.0244273	.0122136	.0061068	.0030534	.0015267	.0007633
62	.0812261	.0355979	.0182732	.0091366	.0045683	.0022841	.0011420	.0005710
63	.0591999	.0247645	.0123753	.0061877	.0030938	.0015469	.0007734	.0003867
64	.0421690	.0169211	.0084605	.0042302	.0021151	.0010575	.0005287	.0002643
65	.0293477	.0104319	.0052159	.0026079	.0013039	.0006519	.0003259	.0001629
66	.0199477	.0075457	.0037728	.0018864	.0009432	.0004716	.0002358	.0001179
67	.0132425	.0044747	.0022373	.0011186	.0005593	.0002796	.0001398	.0000699
68	.0085815	.0028577	.0014288	.0007144	.0003572	.0001786	.0000893	.0000446
69	.0054277	.0018031	.0009015	.0004507	.0002253	.0001126	.0000563	.0000281
70	.0033500	.0011306	.0005653	.0002826	.0001413	.0000706	.0000353	.0000176
71	.0020172	.0006306	.0003153	.0001576	.0000788	.0000394	.0000197	.0000098
72	.0011848	.0003824	.0001912	.0000956	.0000478	.0000239	.0000119	.0000059
73	.0006787	.0002128	.0001064	.0000532	.0000266	.0000133	.0000066	.0000033
74	.0003790	.0001229	.0000614	.0000307	.0000153	.0000077	.0000038	.0000019
75	.0002064	.0000617	.0000308	.0000154	.0000077	.0000038	.0000019	.0000009
76	.0001095	.0000351	.0000175	.0000088	.0000044	.0000022	.0000011	.0000005
77	.0000566	.0000153	.0000076	.0000038	.0000019	.0000009	.0000004	.0000002
78	.0000283	.0000080	.0000040	.0000020	.0000010	.0000005	.0000002	.0000001
79	.0000140	.0000041	.0000020	.0000010	.0000005	.0000002	.0000001	.0000000
80	.0000067	.0000020	.0000010	.0000005	.0000002	.0000001	.0000000	.0000000
81	.0000037	.0000012	.0000006	.0000003	.0000001	.0000000	.0000000	.0000000
82	.0000020	.0000006	.0000003	.0000001	.0000000	.0000000	.0000000	.0000000
83	.0000010	.0000003	.0000001	.0000000	.0000000	.0000000	.0000000	.0000000
84	.0000005	.0000001	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
85	.0000002	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
86	.0000001	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
87	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
88	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
89	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
90	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
91	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
92	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
93	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
94	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
95	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
96	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
97	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
98	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
99	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
100	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
101	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
102	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
103	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
104	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000

	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	1.00000000	1.00000000
19	1.00000000	1.00000000
20	1.00000000	1.00000000
21	1.00000000	1.00000000
22	1.00000000	1.00000000
23	1.00000000	1.00000000
24	1.00000000	1.00000000
25	1.00000000	1.00000000
26	1.00000000	1.00000000
27	1.00000000	1.00000000
28	1.00000000	1.00000000
29	1.00000000	1.00000000
30	1.00000000	1.00000000
31	1.00000000	1.00000000
32	1.00000000	1.00000000
33	1.00000000	1.00000000
34	1.00000000	1.00000000
35	1.00000000	1.00000000
36	1.00000000	1.00000000
37	1.00000000	1.00000000

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

2P	.49	.50
38	1.00000000	1.00000000
39	1.00000000	1.00000000
40	1.00000000	1.00000000
41	1.00000000	1.00000000
42	.99999999	1.00000000
43	.99999998	.99999999
44	.99999996	.99999999
45	.99999989	.99999997
46	.99999976	.99999993
47	.99999946	.99999983
48	.99999883	.99999961
49	.99999756	.99999916
50	.99999502	.99999822
51	.99999016	.99999634
52	.99998109	.99999269
53	.99996466	.99998581
54	.99993578	.99997322
55	.99988645	.99995083
56	.99980458	.99991217
57	.99967254	.99984728
58	.99946556	.99974139
59	.99915013	.99957344
60	.99868269	.99931440
61	.99800902	.99892583
62	.97064667	.98358991
63	.85775888	.97544224
64	.64068233	.9644304
65	.4186228	.9494985
66	.28909049	.92999723
67	.1870156	.9051207
68	.1166772	.8743344
69	.7695414	.8372098
70	.7172293	.7936287
71	.6593492	.7438218
72	.5974730	.6884078
73	.5330692	.6283655
74	.4678005	.5650385
75	.4013964	.5000000
76	.3415180	.4349618
77	.2816308	.3716345
78	.2309028	.3115972
79	.1841395	.2561762
80	.1437599	.2063713
81	.1098133	.1627902
82	.0820299	.1256656
83	.0598935	.0948793
84	.0427251	.0700277
85	.0297647	.0505015
86	.0202424	.0355696
87	.0134340	.0244576
88	.0086971	.0164109
89	.0054906	.0107417
90	.0033790	.0068560
91	.0020266	.0042656
92	.0011841	.0025861
93	.0006738	.0015272
94	.0003733	.0008783
95	.0002013	.0004917
96	.0001036	.0002678
97	.0000539	.0001419
98	.0000267	.0000731
99	.0000129	.0000366
100	.0000060	.0000178
101	.0000027	.0000084
102	.0000012	.0000039
103	.0000005	.0000017
104	.0000002	.0000007
105	.0000001	.0000003
106		.0000001
107		.0000001

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	.17	.18	.19	.20	.21	.22	.23	.24
6	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	.99999990	.99999998	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
8	.99999958	.9999998	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
9	.99999846	.99999956	.99999988	.99999997	.99999999	1.00000000	1.00000000	1.00000000
10	.99999457	.99999840	.99999955	.99999988	.99999997	.99999999	1.00000000	1.00000000
11	.99998352	.99999481	.99999844	.99999955	.99999988	.99999997	.99999999	1.00000000
12	.99995471	.99998479	.99999514	.99999852	.99999957	.99999988	.99999997	.99999999
13	.99986631	.99995931	.99993618	.99995593	.99999652	.99999960	.99999989	.99999997
14	.99737774	.99989994	.99996385	.99987601	.99999596	.99999874	.99999963	.99999989
15	.99433987	.9977241	.9991261	.9996822	.9998901	.99999639	.99999887	.99999966
16	.98886873	.99518959	.99803363	.9992424	.99977228	.99999037	.99999681	.99999900
17	.97933080	.9904849	.9958794	.9983148	.9993476	.9997604	.9999	.9999722
18	.9638749	.9823508	.9918914	.9964871	.9985613	.9994418	.9997944	.9999280
19	.9405186	.9621577	.9849755	.9931109	.9970170	.9988779	.9995253	.9998249
20	.92072830	.9490177	.9737155	.9872469	.9941650	.9974770	.9989669	.9995988
21	.86269690	.9201092	.9564094	.9776446	.9891993	.9980735	.9978744	.9991310
22	.8061641	.8807986	.9312754	.9627840	.9810278	.9958771	.9938543	.9982154
23	.7382690	.8302004	.9067150	.9409996	.9682911	.983369	.9923160	.9965231
24	.6606777	.7681880	.8515940	.9106909	.9494488	.9730429	.9864342	.9935471
25	.5769688	.6965876	.7955873	.8705951	.9229444	.9567835	.9771372	.9885740
26	.4904106	.6171519	.7293749	.8200743	.8897352	.9336701	.9631411	.9806590
27	.4051470	.5333195	.6547705	.7591522	.8424544	.907045	.950777	.9864257
28	.3240436	.4488057	.5742654	.6896342	.7865534	.8617289	.9154691	.9514545
29	.2527812	.3673102	.4913783	.6130689	.7219602	.8114264	.8792897	.9270384
30	.1906023	.2920519	.4095851	.5325434	.6496144	.7517393	.8338265	.8949205
31	.1392360	.2254208	.3322014	.4531368	.5720488	.6839390	.7790541	.8540126
32	.0985103	.1688028	.2693656	.3727694	.4922345	.6097045	.7158288	.8044063
33	.0674907	.1225088	.2006440	.2997171	.4133357	.5319466	.6453747	.7452917
34	.0447724	.0861073	.1492355	.2344127	.3383410	.4535240	.5702371	.6789977
35	.02887602	.0588040	.1077316	.1782317	.2697401	.3774080	.4930043	.6069115
36	.01788005	.0388673	.0754779	.1316817	.2093019	.3062548	.4166543	.5314930
37	.0107787	.0249874	.0513045	.0950664	.1579904	.2421160	.3435893	.4554430
38	.0062907	.0155323	.0338138	.0658740	.1158740	.1864392	.2733927	.3775470
39	.0035572	.0091603	.0216474	.0445135	.0827207	.1397066	.2168068	.3118766
40	.0019494	.0054696	.0134363	.0292998	.0573561	.1018577	.1656476	.2488368
41	.0010355	.0030996	.0080948	.0186368	.0386458	.0722337	.1232420	.1935940
42</								

	.25	.26	.27	.28	.29	.30	.31	.32
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
14	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
15	.99999999	.99999999	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
16	.99999997	.99999991	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
17	.999999912	.99999973	.99999972	.99999998	.99999999	1.00000000	1.00000000	1.00000000
18	.999999760	.99999924	.99999933	.99999993	.99999998	1.00000000	1.00000000	1.00000000
19	.999999386	.99999795	.99999935	.99999980	.99999994	.99999998	1.00000000	1.00000000
20	.999999520	.99999748	.99999826	.99999945	.99999993	.99999995	.99999999	1.00000000
21	.999996628	.99998756	.99999564	.99999854	.99999954	.99999986	.99999996	.99999999
22	.99999724	.99997182	.99999862	.99999636	.99999879	.99999961	.99999983	.99999997
23	.99985075	.99953938	.99997658	.99999690	.99999909	.99999969	.99999990	.99999997
24	.99970942	.99949764	.99989764	.99990685	.99992991	.99997593	.99999988	.99999997
25	.99945978	.99975803	.99989721	.99995853	.99998410	.99999970	.99999999	.99999993
26	.99904038	.99954922	.99979927	.99991514	.99996596	.99999970	.99999939	.99999837
27	.99836826	.99919648	.99962513	.99987410	.99993033	.99997220	.99999945	.99999619
28	.99733934	.99826730	.99932933	.99968738	.99984309	.99994303	.99997741	.99999148
29	.99583270	.99747881	.99848873	.99944038	.99981358	.99998814	.99995364	.99998174
30	.99371995	.99645032	.99810092	.99937553	.99953753	.99976915	.99988773	.99996246
31	.99077947	.99610119	.99980535	.99802866	.99917000	.99981806	.99983734	.99992567

$$P(n, n, v) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

1 = 150

λ	.25	.26	.27	.28	.29	.30	.31	.32
32	.8721434	.9210750	.9538816	.9744769	.9866136	.9933421	.9968578	.9985921
33	.8267110	.8883751	.9319135	.9606620	.9784614	.9888183	.9944929	.9974287
34	.7725593	.8472928	.9028597	.9414814	.9655549	.9818857	.9906936	.9954625
35	.7104441	.7976216	.8658810	.9157431	.9498157	.9716615	.9848197	.9924837
36	.6418216	.7397806	.8205515	.8826079	.9271648	.9571391	.9760734	.9873259
37	.5687514	.6748614	.7669943	.8414446	.8976054	.9372578	.9635208	.9798728
38	.4937062	.6045837	.7059616	.7921228	.8604058	.9100339	.9461448	.9698666
39	.4193194	.5311570	.6388346	.7350855	.8152229	.8775457	.9280305	.9639445
40	.3481135	.4570687	.5675342	.6713957	.7623241	.8336664	.8929787	.9335080
41	.2822441	.3848327	.4943536	.6026430	.7021525	.7873924	.8536366	.9068804
42	.2235384	.3167395	.4217354	.5309196	.6363235	.7308089	.8068855	.8731288
43	.1723003	.2546492	.3520304	.4585321	.5665330	.6684487	.7531436	.8319736
44	.1297176	.1998569	.2872774	.3878280	.4949588	.6010306	.6980223	.7833771
45	.0951351	.1530411	.2290360	.3209627	.4238518	.5330767	.6342198	.7276766
46	.0679813	.1142950	.1782941	.2597107	.3554397	.4598342	.5657455	.6659771
47	.0473209	.0832207	.1354552	.2053385	.2916568	.3904434	.4955238	.5997015
48	.0320820	.0590618	.0903950	.1358501	.1940095	.2646381	.3427138	.4298466
49	.0211819	.0408477	.0725689	.1150556	.1684835	.2341208	.3154115	.4039991
50	.0136186	.0275256	.0511451	.0878982	.1405240	.2101313	.2934689	.3927318
51	.0085260	.0180708	.0351389	.0630688	.1050795	.1633923	.2383463	.3278377
52	.0051975	.0115771	.0215771	.0374457	.0611577	.0931157	.1337280	.1839545
53	.0030851	.0072000	.0153568	.0301179	.0546180	.0920585	.1449827	.2143111
54	.0017832	.0043693	.0097667	.0200381	.0379463	.0666726	.1092820	.1676303
55	.0010036	.0025828	.0060527	.0129967	.0257143	.0471218	.0803691	.1281699
56	.0005501	.0014871	.0036550	.0082171	.0169937	.0324968	.0575739	.0957577
57	.0002934	.0008141	.0021506	.0050635	.0109511	.0218639	.0404927	.0698824
58	.0001526	.0004557	.0012330	.0030416	.0068809	.0143488	.0277141	.0498016
59	.0000773	.0002425	.0006888	.0017806	.0042152	.0091845	.0185085	.0346494
60	.0000381	.0001258	.0003749	.0010160	.0025174	.0057334	.0120584	.0235308
61	.0000183	.0000635	.0001988	.0005650	.0014657	.0034901	.0076649	.0155951
62	.0000086	.0000313	.0001028	.0003062	.0008319	.0020716	.0047520	.0100853
63	.0000039	.0000150	.0000517	.0001617	.0004602	.0011990	.0028734	.0063633
64	.0000017	.0000070	.0000254	.0000833	.0002482	.0006766	.0016945	.0039166
65	.0000007	.0000032	.0000121	.0000418	.0001305	.0003722	.0009744	.0023516
66	.0000003	.0000014	.0000057	.0000204	.0000669	.0001997	.0005464	.0013771
67	.0000001	.0000006	.0000026	.0000097	.0000334	.0001044	.0002988	.0007866
68	.0000001	.0000003	.0000011	.0000045	.0000163	.0000532	.0001593	.0004381
69		.0000001	.0000005	.0000020	.0000077	.0000264	.0000828	.0002380
70			.0000002	.0000009	.0000036	.0000128	.0000420	.0001260
71			.0000001	.0000004	.0000016	.0000061	.0000207	.0000651
72				.0000002	.0000007	.0000028	.0000100	.0000328
73				.0000001	.0000003	.0000012	.0000047	.0000151
74					.0000001	.0000005	.0000021	.0000077
75					.0000001	.0000002	.0000010	.0000036
76						.0000001	.0000004	.0000016
77							.0000002	.0000007
78							.0000001	.0000003
79								.0000001
80								.0000001
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99								
100								

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 150

	.33	.34	.35	.36	.37	.38	.39	.40
45	.0066785	.0092948	.0159083	.0245491	.03700763	.0534626	.0741310	.09956713
46	.7546695	.8282024	.8854251	.9272870	.9561146	.9748231	.9862756	.9928937
47	.6951974	.7798823	.8479582	.8998871	.9373983	.9627364	.9789169	.9886668
48	.6324705	.7248018	.8033169	.8660075	.9130751	.9463442	.9685063	.9824318
49	.5651172	.6639142	.7517361	.8249931	.8824217	.9247854	.9542239	.9735114
50	.4950612	.5986210	.6939203	.7760685	.8449465	.8972790	.9352156	.9611326
51	.4273556	.5306765	.6310344	.7224006	.8004879	.8632262	.9106669	.9444625
52	.3610025	.4620457	.5646391	.6622154	.7492906	.8223016	.8798928	.9226714
53	.2987822	.3947348	.4965742	.5977623	.6920453	.7745476	.8424329	.8950136
54	.2421164	.3306181	.4228055	.5307249	.6294795	.7180484	.7861491	.8429196
55	.1919817	.2712867	.3632572	.4529893	.5464296	.6308456	.7072913	.7720910
56	.1488808	.2179376	.3016510	.3964852	.4970670	.5971042	.6905367	.7725814
57	.1128676	.1713148	.2453761	.3330243	.4300852	.5308293	.6288805	.7188503
58	.0836158	.1317065	.1954046	.2741559	.3652111	.4638418	.5640784	.6597774
59	.0605139	.0999693	.1522594	.2210602	.3041187	.3980092	.4975436	.5966306
60	.0427711	.0727080	.1160332	.1744869	.2441707	.3350921	.4312122	.5309865
61	.0295170	.0521741	.0864485	.1347578	.1983356	.2766063	.3688924	.4646130
62	.0198853	.0365671	.0629449	.1017843	.1551529	.2237185	.3062199	.393276
63	.0130754	.0250258	.0447777	.0751595	.1187473	.1771872	.2505366	.3386501
64	.0083902	.0167210	.0311134	.0542400	.0888816	.1373509	.2000085	.2768701
65	.0052534	.0109053	.0211116	.0382439	.0650379	.1041606	.1575894	.2259444
66	.0032091	.0064914	.0139861	.0263392	.0465103	.0772460	.1210303	.1794377
67	.0019124	.0041115	.0090447	.0177150	.0324966	.0560011	.0909276	.1395076
68	.0011117	.0024130	.0057088	.0116330	.0221780	.0396762	.0667983	.1061333
69	.0006303	.0015449	.0035164	.0074572	.0147810	.0274635	.0479684	.0789757
70	.0003486	.0008921	.0021134	.0046658	.0096183	.0185680	.0336614	.06174596
71	.0001880	.0005013	.0012392	.0028489	.0061098	.0122592	.0237079	.0438614
72	.0000989	.0002751	.0007089	.0016973	.0037880	.0079024	.0154520	.0283933
73	.0000507	.0001472	.0003955	.0009866	.0022919	.0049724	.0101031	.0192731
74	.0000253	.0000768	.0002152	.0005594	.0013530	.0030537	.0064490	.0127765
75	.0000124	.0000391	.0001142	.0003094	.0007793	.0018300	.0040181	.0082699
76	.0000059	.0000194	.0000591	.0001669	.0004370	.0010700	.0024432	.0052254
77	.0000027	.0000094	.0000298	.0000878	.0002399	.0006103	.0014496	.0032225
78	.0000012	.0000044	.0000147	.0000450	.0001282	.0003395	.0008390	.0019392
79	.0000005	.0000020	.0000070	.0000225	.0000668	.0001842	.0004737	.0011385
80	.0000002	.0000009	.0000033	.0000110	.0000339	.0000975	.0002608	.0006520
81	.0000001	.0000004	.0000015	.0000052	.0000168	.0000503	.0001401	.0003642
82	.0000001	.0000002	.0000007	.0000024	.0000081	.0000253	.0000733	.0001984
83	.0000001	.0000001	.0000003	.0000011	.0000038	.0000124	.0000374	.0001053
84	.0000001	.0000001	.0000001	.0000005	.0000018	.0000059	.0000186	.0000545
85	.0000001	.0000001	.0000001	.0000002	.0000008	.0000028	.0000090	.0000275
86	.0000001	.0000001	.0000001	.0000001	.0000003	.0000012	.0000043	.0000135
87	.0000001	.0000001	.0000001	.0000001	.0000001	.0000006	.0000020	.0000065
88	.0000001	.0000001	.0000001	.0000001	.0000001	.0000002	.0000008	.0000030
89	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000004	.0000014
90	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000002	.0000006
91	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000003
92	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001	.0000001

	.41	.42	.43	.44	.45	.46	.47	.48
1	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
2	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
3	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
4	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
5	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
6	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
7	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
8	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
9	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
10	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
11	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
12	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
13	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
14	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
15	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
16	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
17	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
18	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
19	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
20	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
21	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
22	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
23	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
24	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
25	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
26	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
27	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
28	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
29	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
30	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
31	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
32	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
33	.99999997	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
34	.99999993	.99999998	.99999999	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
35	.99999983	.99999995	.99999998	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000
36	.99999959	.99999987	.99999996	.99999999	1.00000000	1.00000000	1.00000000	1.00000000
37	.99999907	.99999969	.99999990	.99999997	.99999999	1.00000000	1.00000000	1.00000000
38	.99999875	.99999930	.99999977	.99999993	.99999998	.99999999	1.00000000	1.00000000
39	.99999856	.99999845	.99999947	.99999983	.99999995	.99999998	.99999999	1.00000000
40	.999998102	.99999867	.99999883	.99999961	.99999988	.99999996	.99999999	1.00000000
41	.999998212	.999999312	.999999748	.999999913	.99999971	.99999991	.99999997	.99999999
42	.999998553	.999998620	.999999476	.999999811	.99999936	.99999979	.99999994	.99999998
43	.999998360	.999997320	.999998942	.999999604	.99999859	.99999953	.99999985	.99999995
44	.999998337	.999997457	.99999931	.999999195	.99999703	.99999896	.99999965	.99999989

$$P(n, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 150

x	.41	.42	.43	.44	.45	.46	.47	.48
45	.9979510	.9990794	.9996076	.9998414	.9999392	.9999779	.9999984	.9999978
46	.9965061	.9983694	.9992780	.9996968	.9998793	.9999545	.9999837	.9999943
47	.9942142	.9971959	.9987103	.9994374	.9997673	.9999088	.9999642	.9999881
48	.9906900	.9951154	.9977688	.9989845	.9995543	.9998585	.9999317	.9999751
49	.9854348	.9923334	.9963290	.9982248	.9992088	.9997469	.9999441	.9999993
50	.9778328	.9879888	.9938203	.9969887	.9986028	.9993867	.9997480	.9998996
51	.9671618	.9815460	.9901498	.9950092	.9976011	.9989069	.9995881	.9998071
52	.9526215	.9723979	.9847205	.9919687	.9959943	.9981054	.9991309	.9996397
53	.9333847	.9597859	.9769287	.9874204	.9934913	.9968586	.9985141	.9993494
54	.9086665	.9424988	.9660455	.9808126	.9897044	.9947583	.9974699	.9988431
55	.8778115	.9209327	.9513058	.9714865	.9841389	.9916255	.9958066	.9980103
56	.8403861	.8931686	.9318973	.9586965	.9761910	.9869575	.9932381	.9966488
57	.7962662	.8590618	.9070593	.9418485	.9631593	.9802368	.9893590	.9945673
58	.7457049	.8183318	.8761588	.9215587	.9502744	.9707880	.9836948	.9913686
59	.6883363	.7710394	.8387810	.8917869	.9338035	.9640792	.9818637	.9906343
60	.6283181	.7176386	.7948123	.8576327	.9058332	.9407069	.9645037	.9798199
61	.5639760	.6589897	.7445055	.8170005	.8749177	.91853407	.9495247	.9702797
62	.4980070	.5963292	.6885125	.7658981	.8375980	.8906815	.9299265	.9572867
63	.4322003	.5311944	.6278773	.7167728	.7937665	.8566148	.9049784	.9409708
64	.3687234	.4653109	.5639831	.6584663	.7436734	.8140792	.8740753	.9176177
65	.3079821	.4004569	.4984601	.5961908	.6879590	.7691396	.8368228	.8900167
66	.2525027	.3383208	.4330609	.5314518	.6276472	.7162356	.7931133	.8559975
67	.2028504	.2803786	.3695218	.4659420	.5640955	.6582955	.7431948	.8155550
68	.1595916	.2277630	.3094266	.4014100	.4989053	.5962091	.6876941	.7687513
69	.1229992	.1812626	.2540914	.3359216	.4336734	.5407922	.6512708	.7598245
70	.0925971	.1412458	.2044824	.2817335	.3705009	.4655113	.5633105	.6581695
71	.0682307	.1077145	.1611771	.2291934	.3105693	.4021967	.4993454	.5963800
72	.0491517	.0803553	.1243670	.1826791	.2553197	.3404654	.4344321	.5321136
73	.0346044	.0586173	.0938983	.1425790	.2057208	.2827670	.3712708	.4670238
74	.0248029	.0417979	.0693380	.1089138	.1623592	.2302500	.3114236	.4028245
75	.0159924	.0291245	.0500603	.0813901	.1254438	.1836997	.2561999	.3411617
76	.0104925	.0198248	.0353230	.0594761	.0948375	.1435169	.2065750	.2834838
77	.0067207	.0131792	.0243517	.0424844	.07011255	.1097376	.1631471	.2309421
78	.0042018	.0085544	.0163975	.0296540	.0506944	.0826837	.1261360	.1843328
79	.0025636	.0053300	.0107817	.0202192	.0358153	.0600368	.0954187	.1440657
80	.0015261	.0033514	.0069205	.0134630	.0247202	.0439202	.0705926	.1101901
81	.0008862	.0020220	.0043354	.0087517	.0166636	.0299797	.0510337	.0824381
82	.0005019	.0011901	.0026501	.0055527	.0109670	.0204533	.0360798	.0602998
83	.0002772	.0006831	.0015803	.0034377	.0070451	.0136248	.0249062	.0431042
84	.0001498	.0003824	.0009191	.0020762	.0044162	.0088591	.0167882	.0300999
85	.0000783	.0002047	.0005212	.0012230	.0027006	.0056211	.0110463	.0205853
86	.0000401	.0001110	.0002882	.0007025	.0015106	.0034794	.0070925	.0136628
87	.0000200	.0000575	.0001553	.0003933	.0009366	.0021004	.0044425	.0086750
88	.0000097	.0000291	.0000815	.0002146	.0005310	.0012363	.0027138	.0054839
89	.0000046	.0000143	.0000417	.0001141	.0002933	.0007093	.0016162	.0034734
90	.0000021	.0000069	.0000208	.0000591	.0001579	.0003966	.0009382	.0020938
91	.0000009	.0000032	.0000101	.0000299	.0000828	.0002160	.0005307	.0012295
92	.0000004	.0000015	.0000048	.0000147	.0000423	.0001146	.0002925	.0007034
93	.0000002	.0000006	.0000022	.0000070	.0000210	.0000592	.0001569	.0003920
94	.0000001	.0000003	.0000010	.0000033	.0000102	.0000298	.0000820	.0002127
95		.0000001	.0000004	.0000015	.0000048	.0000145	.0000417	.0001124
96			.0000002	.0000008	.0000022	.0000069	.0000206	.0000578
97			.0000001	.0000003	.0000010	.0000032	.0000099	.0000289
98				.0000001	.0000004	.0000014	.0000047	.0000141
99					.0000002	.0000006	.0000021	.0000066
100					.0000001	.0000003	.0000009	.0000031
101						.0000001	.0000004	.0000014
102							.0000002	.0000006
103							.0000001	.0000002
104								.0000001

x	.49	.50
1	1.00000000	1.00000000
2	1.00000000	1.00000000
3	1.00000000	1.00000000
4	1.00000000	1.00000000
5	1.00000000	1.00000000
6	1.00000000	1.00000000
7	1.00000000	1.00000000
8	1.00000000	1.00000000
9	1.00000000	1.00000000
10	1.00000000	1.00000000
11	1.00000000	1.00000000
12	1.00000000	1.00000000
13	1.00000000	1.00000000
14	1.00000000	1.00000000
15	1.00000000	1.00000000
16	1.00000000	1.00000000
17	1.00000000	1.00000000
18	1.00000000	1.00000000
19	1.00000000	1.00000000
20	1.00000000	1.00000000
21	1.00000000	1.00000000
22	1.00000000	1.00000000
23	1.00000000	1.00000000
24	1.00000000	1.00000000
25	1.00000000	1.00000000
26	1.00000000	1.00000000
27	1.00000000	1.00000000
28	1.00000000	1.00000000
29	1.00000000	1.00000000
30	1.00000000	1.00000000
31	1.00000000	1.00000000
32	1.00000000	1.00000000
33	1.00000000	1.00000000

$$P(r, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 150

x	.49	.50
34	1.00000000	1.00000000
35	1.00000000	1.00000000
36	1.00000000	1.00000000
37	1.00000000	1.00000000
38	1.00000000	1.00000000
39	1.00000000	1.00000000
40	1.00000000	1.00000000
41	1.00000000	1.00000000
42	.99999999	1.00000000
43	.99999999	1.00000000
44	.99999997	.99999999
45	.99999992	.99999998
46	.99999982	.99999995
47	.99999971	.99999983
48	.99999954	.99999972
49	.99999938	.99999958
50	.99999927	.99999949
51	.999999254	.999999728
52	.999999553	.999999451
53	.9999997271	.999999285
54	.99999993	.999999151
55	.9999991062	.999999038
56	.999999469	.9999993150
57	.999999724	.999999592
58	.999999956	.999999872
59	.999999949	.999999942
60	.9999991173	.999999392
61	.9999993912	.9999992012
62	.999999740	.9999994237
63	.9999999790	.999999658
64	.9999999547	.999999864
65	.9999994320	.999999644
66	.9999994877	.999999354
67	.9999996223	.9999995465
68	.9999994430	.999999776
69	.9999998420	.999999721
70	.999999582	.9999995193
71	.9999997104	.999999252
72	.9999997924	.9999991123
73	.9999994271	.999999341
74	.999999822	.9999997020
75	.999999544	.9999995193
76	.999999384	.9999994807
77	.999999555	.9999992980
78	.999999735	.9999995159
79	.999999935	.9999998577
80	.999999459	.9999992748
81	.9999994472	.999999807
82	.9999996438	.9999994279
83	.9999997404	.999999224
84	.9999991376	.9999994535
85	.9999991153	.9999992646
86	.999999083	.999999356
87	.9999997701	.999999136
88	.999999181	.9999994342
89	.999999617	.999999763
90	.9999994137	.999999798
91	.999999643	.9999995608
92	.9999995969	.9999994258
93	.999999238	.9999990566
94	.9999995225	.9999992026
95	.9999992855	.9999996850
96	.9999991525	.9999993798
97	.999999792	.9999992049
98	.999999400	.9999991075
99	.999999197	.9999990549
100	.999999094	.9999990272
101	.999999044	.9999990131
102	.999999020	.9999990062
103	.999999009	.9999990028
104	.999999004	.9999990014
105	.999999002	.9999990005
106	.999999001	.9999990002
107	.999999000	.9999990001

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$$P(c, p, c) = \sum_{i=0}^n \binom{n}{i} p^i (1-p)^{n-i}$$

n = 2

c \ p	.001	.002	.003	.004	.005	.006	.007	.008
1	.00100000	.00200000	.00300000	.00400000	.00500000	.00600000	.00700000	.00800000

c \ p	.009	.010
1	.00900000	.01000000

n = 2

c \ p	.001	.002	.003	.004	.005	.006	.007	.008
1	.00199900	.00399600	.00599100	.00798400	.00997500	.01196400	.01395100	.01593600
2	.00000100	.00000400	.00000900	.00001600	.00002500	.00003600	.00004900	.00006400

c \ p	.009	.010
1	.01791900	.01990000
2	.00008100	.00010000

n = 3

c \ p	.001	.002	.003	.004	.005	.006	.007	.008
1	.00299700	.00598800	.00897300	.01195200	.01492500	.01789200	.02085300	.02380800
2	.00000300	.00001200	.00002700	.00004800	.00007500	.00010800	.00014700	.00019200
3				.00000001	.00000001	.00000003	.00000003	.00000005

c \ p	.009	.010
1	.02675770	.02970100
2	.00024150	.00029800
3	.00000070	.00000100

n = 4

c \ p	.001	.002	.003	.004	.005	.006	.007	.008
1	.00399400	.00797600	.01194600	.01590400	.01985000	.02378400	.02770700	.03161800
2	.00000600	.00002300	.00005300	.00009600	.00014000	.00021400	.00029900	.00039600
3			.00000001	.00000003	.00000005	.00000009	.00000014	.00000020

c \ p	.009	.010
1	.03551600	.03940400
2	.00048400	.00059200
3	.00000000	.00000040

n = 5

c \ p	.001	.002	.003	.004	.005	.006	.007	.008
1	.00499000	.00996000	.01491000	.01984000	.02475000	.02964000	.03451000	.03936000
2	.00001000	.00003900	.00008900	.00015600	.00024700	.00035500	.00048300	.00062800
3		.00000001	.00000003	.00000005	.00000010	.00000018	.00000034	.00000051

c \ p	.009	.010
1	.04419730	.04901000
2	.00079950	.00098001
3	.00000070	.00000090

$$P(x, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

$x \backslash p$	.009	.010
1	.0864411	.0956179
2	.0034741	.0043662
3	.0000834	.0001138
4	.0000013	.0000020

$x \backslash p$	.001	.002	.003	.004	.005	.006	.007	.008
1	.0109482	.0217813	.0325094	.0431305	.0536454	.0640552	.0743608	.0845631
2	.0000847	.0002174	.0004862	.0008591	.0013344	.0019100	.0025848	.0033550
3	.0000002	.0000013	.0000044	.0000103	.0000200	.0000344	.0000543	.0000805
4				.0000001	.0000002	.0000004	.0000006	.0000013

$x \backslash p$	.009	.010
1	.0946631	.1046617
2	.0042208	.0051797
3	.0001140	.0001554
4	.0000021	.0000031

$x \backslash p$	.001	.002	.003	.004	.005	.006	.007	.008
1	.0114342	.0237378	.0354119	.0465980	.0573772	.0676709	.0774803	.0868066
2	.0000656	.0002605	.0005822	.0010282	.0015959	.0022842	.0030866	.0040047
3	.0000002	.0000017	.0000058	.0000137	.0000266	.0000486	.0000780	.0001067
4				.0000003	.0000005	.0000006	.0000011	.0000019
5								

$x \backslash p$	.009	.010
1	.1028112	.1156151
2	.0050348	.0061745
3	.0001509	.0002056
4	.0000031	.0000046
5		.0000001

$x \backslash p$	.001	.002	.003	.004	.005	.006	.007	.008
1	.0124223	.0256903	.0383057	.0507701	.0630853	.0752529	.0872744	.0991518
2	.0000774	.0003075	.0006867	.0012119	.0018708	.0026672	.0036309	.0047078
3	.0000003	.0000023	.0000076	.0000178	.0000344	.0000591	.0000931	.0001379
4			.0000001	.0000002	.0000004	.0000009	.0000016	.0000028
5								

$x \backslash p$	.009	.010
1	.1108859	.1224740
2	.0059148	.0072489
3	.0001949	.0002653
4	.0000044	.0000067
5	.0000001	.0000001

$x \backslash p$	.001	.002	.003	.004	.005	.006	.007	.008
1	.0134094	.0276389	.0411907	.0545570	.0677499	.0808013	.0936638	.1063883
2	.0000903	.0003582	.0007996	.0014108	.0021839	.0031226	.0042164	.0054633
3	.0000004	.0000029	.0000096	.0000225	.0000437	.0000748	.0001178	.0001748
4			.0000001	.0000002	.0000006	.0000018	.0000033	.0000060
5								.0000001

$x \backslash p$	.009	.010
1	.1188879	.1312642
2	.0068596	.0084012
3	.0002443	.0003351
4	.0000081	.0000098
5	.0000001	.0000002

$$P(c, p, r) = \sum_{i=0}^n \binom{n}{i} p^i (1-p)^{n-i}$$

n = 15

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0140955	.0295036	.0440672	.0581488	.0724310	.0863165	.1000070	.1135075
2	.0001041	.0004138	.0009208	.0016228	.0025178	.0035867	.0048485	.0062703
3	.0000005	.0000036	.0000170	.0000321	.0000544	.0000831	.0001165	.0001568
4			.0000001	.0000003	.0000004	.0000017	.0000031	.0000058
5							.0000001	.0000001

c/p	.009	.010
1	.1268179	.1300416
2	.0070678	.0096298
3	.0003059	.0004158
4	.0000083	.0000125
5	.0000002	.0000003

n = 16

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0150008	.0315245	.0469350	.0618154	.0770609	.0917986	.1063078	.1205994
2	.0001189	.0004711	.0010508	.0018497	.0028614	.0040850	.0055087	.0071394
3	.0000008	.0000044	.0000147	.0000345	.0000667	.0001141	.0001794	.0002453
4			.0000001	.0000004	.0000011	.0000022	.0000041	.0000069
5							.0000001	.0000001

c/p	.009	.010
1	.1346766	.1405422
2	.0099383	.0109129
3	.0003719	.0005079
4	.0000110	.0000165
5	.0000002	.0000004

n = 17

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0160647	.0334614	.0497942	.0658669	.0815835	.0972478	.1125636	.1276346
2	.0001344	.0005132	.0011879	.0020908	.0033344	.0048511	.0065213	.0083361
3	.0000007	.0000053	.0000178	.0000417	.0000807	.0001379	.0002167	.0003201
4			.0000002	.0000006	.0000014	.0000029	.0000053	.0000090
5							.0000001	.0000008

c/p	.009	.010
1	.1424645	.1570568
2	.0100700	.0123090
3	.0004510	.0006122
4	.0000142	.0000214
5	.0000003	.0000006

n = 18

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0170478	.0351945	.0526448	.0694034	.0862751	.1025644	.1187757	.1346135
2	.0001514	.0005991	.0013337	.0023459	.0036246	.0051671	.0069387	.0089989
3	.0000008	.0000064	.0000213	.0000499	.0000924	.0001647	.0002587	.0003818
4			.0000002	.0000007	.0000018	.0000037	.0000068	.0000118
5						.0000001	.0000001	.0000003

c/p	.009	.010
1	.1501823	.1654862
2	.0112615	.0137563
3	.0005374	.0007292
4	.0000181	.0000274
5	.0000003	.0000008

$$P(x, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 19

x/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.01000300	.0373237	.0854469	.0733250	.0704437	.1080484	.1249443	.1418366
2	.0001691	.0006667	.0014076	.0024149	.0040399	.0067881	.0077414	.0099979
3	.0000010	.0000076	.0000258	.0000573	.0001141	.0001948	.0003084	.0004307
4		.0000001	.0000003	.0000009	.0000023	.0000047	.0000086	.0000144
5					.0000001	.0000001	.0000002	.0000003

x/p	.009	.010
1	.1578304	.1738314
2	.0125110	.0152738
3	.0006341	.0008894
4	.0000288	.0000344
5	.0000006	.0000010

n = 20

x/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0190111	.0392490	.0503204	.0770317	.0953895	.1134001	.1310496	.1484043
2	.0001877	.0007480	.0016496	.0028977	.0044739	.0063659	.0085618	.0110808
3	.0000011	.0000089	.0000296	.0000693	.0001337	.0002381	.0003376	.0004571
4		.0000001	.0000004	.0000012	.0000028	.0000058	.0000106	.0000179
5					.0000001	.0000001	.0000002	.0000003

x/p	.009	.010
1	.1654103	.1880931
2	.0138197	.0168593
3	.0007410	.0010036
4	.0000083	.0000436
5	.0000008	.0000014

n = 21

x/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0207913	.0411705	.0511454	.0807836	.0999126	.1187197	.1371528	.1552171
2	.0002074	.0008190	.0018196	.0031943	.0049285	.0070081	.0094194	.0121490
3	.0000013	.0000104	.0000345	.0000806	.0001554	.0002649	.0004131	.0006113
4		.0000001	.0000005	.0000015	.0000035	.0000071	.0000131	.0000220
5					.0000001	.0000001	.0000003	.0000006

x/p	.009	.010
1	.1729215	.1902721
2	.0151840	.0185117
3	.0006587	.0011621
4	.0000347	.0000532
5	.0000011	.0000013

n = 22

x/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0217705	.0430822	.0639620	.0844007	.1044130	.1240074	.1431921	.1619784
2	.0002279	.0008997	.0019970	.0035044	.0054034	.0076784	.0103133	.0132936
3	.0000015	.0000120	.0000398	.0000931	.0001793	.0003054	.0004761	.0007036
4		.0000001	.0000006	.0000018	.0000043	.0000087	.0000159	.0000267
5					.0000001	.0000002	.0000004	.0000008

x/p	.009	.010
1	.1803652	.1983694
2	.0166036	.0202293
3	.0009871	.0013356
4	.0000422	.0000613
5	.0000014	.0000023

x/p	.009	.010
6		.0000001

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 23

%p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0227488	.0450020	.0667701	.0880631	.1088909	.1292633	.1491897	.1686796
2	.0002495	.0009441	.0021835	.0038283	.0058984	.0083763	.0112437	.0144030
3	.0000017	.0000137	.0000457	.0001067	.0002054	.0003496	.0005469	.0008043
4		.0000001	.0000007	.0000021	.0000051	.0000105	.0000191	.0000321
5					.0000001	.0000002	.0000005	.0000010

%p	.009	.010
1	.1877419	.2063857
2	.0180773	.0220107
3	.0011283	.0015246
4	.0000507	.0000761
5	.0000017	.0000029
6		.0000001

n = 24

%p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0237260	.0469120	.0695690	.0917109	.1133465	.1344877	.1551454	.1753301
2	.0002720	.0010721	.0023772	.0041649	.0064134	.0091017	.0122093	.0157166
3	.0000020	.0000157	.0000521	.0001216	.0002339	.0003970	.0006218	.0009137
4		.0000002	.0000008	.0000026	.0000061	.0000125	.0000228	.0000383
5					.0000001	.0000003	.0000006	.0000012

%p	.009	.010
1	.1950522	.2143219
2	.0196045	.0238544
3	.0012807	.0017294
4	.0000604	.0000905
5	.0000022	.0000036
6	.0000001	.0000001

n = 25

%p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0247023	.0488182	.0723611	.0953440	.1177798	.1396808	.1610594	.1819875
2	.0002954	.0011638	.0025788	.0045151	.0069481	.0098540	.0132098	.0169935
3	.0000023	.0000178	.0000591	.0001378	.0002640	.0004500	.0007029	.0010328
4		.0000005	.0000010	.0000030	.0000073	.0000148	.0000278	.0000453
5				.0000001	.0000002	.0000004	.0000008	.0000015

%p	.009	.010
1	.2023967	.2221786
2	.0211835	.0257891
3	.0014456	.0019507
4	.0000713	.0001069
5	.0000027	.0000045
6	.0000001	.0000002

n = 26

%p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0256776	.0507206	.0751440	.0989626	.1221909	.1448427	.1669320	.1884781
2	.0003198	.0012591	.0027882	.0047784	.0075922	.0106329	.0142448	.0183130
3	.0000026	.0000201	.0000667	.0001553	.0002982	.0005064	.0007905	.0011598
4		.0000002	.0000011	.0000016	.0000086	.0000174	.0000317	.0000538
5				.0000001	.0000002	.0000005	.0000010	.0000019
6								.0000001

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$$P(x, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

\	.009	.010
1	.2094761	.2299569
2	.0228135	.0277213
3	.0016233	.0021888
4	.0000837	.0001254
5	.0000033	.0000055
6	.0000001	.0000002

n = 27							
x/p	.001	.002	.003	.004	.005	.006	.007
1	.0266519	.0526191	.0779186	.1025668	.1265799	.1499737	.1727635
2	.0003452	.0013580	.0030052	.0052548	.0080757	.0114382	.0153116
3	.0000029	.0000226	.0000748	.0001742	.0003342	.0005672	.0008847
4		.0000003	.0000013	.0000042	.0000100	.0000204	.0000370
5				.0000001	.0000002	.0000006	.0000012
6							.0000001

\	.009	.010
1	.2165008	.2376573
2	.0244935	.0297456
3	.0018140	.0024441
4	.0000976	.0001450
5	.0000040	.0000067
6	.0000001	.0000002

n = 25							
x/p	.001	.002	.003	.004	.005	.006	.007
1	.0276253	.0545139	.0806848	.1061565	.1309470	.1550738	.1785541
2	.0003715	.0014606	.0032300	.0056440	.0086682	.0122694	.0164158
3	.0000032	.0000252	.0000836	.0001945	.0003729	.0006334	.0009857
4		.0000003	.0000016	.0000049	.0000116	.0000236	.0000430
5				.0000001	.0000003	.0000007	.0000014
6							.0000001

\	.009	.010
1	.2235415	.2452907
2	.0262224	.0318248
3	.0020161	.0027171
4	.0001130	.0001690
5	.0000049	.0000081
6	.0000002	.0000003

n = 23							
x/p	.001	.002	.003	.004	.005	.006	.007
1	.0285976	.0564049	.0834428	.1097319	.1352923	.1601434	.1843042
2	.0003988	.0015667	.0034623	.0060461	.0092796	.0131262	.0175307
3	.0000036	.0000281	.0000931	.0002163	.0004144	.0007022	.0010937
4		.0000004	.0000018	.0000056	.0000134	.0000273	.0000496
5				.0000001	.0000003	.0000008	.0000017
6							.0000001

\	.009	.010
1	.2306287	.2528229
2	.0279921	.0339593
3	.0022359	.0030082
4	.0001302	.0001945
5	.0000059	.0000097
6	.0000002	.0000004

$$P(c, r, p) = \sum_{t=0}^n \binom{n}{t} p^t (1-p)^{n-t}$$

n = 30

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0295649	.05822930	.0861924	.1132930	.1396158	.1651825	.1900141	.2141310
2	.0004279	.0016763	.0037023	.0064604	.0099046	.0140081	.0187180	.0240014
3	.0000040	.0000112	.0001032	.0002396	.0004587	.0007769	.0012089	.0017685
4		.0000004	.0000021	.0000065	.0000154	.0000314	.0000569	.0000930
5				.0000001	.0000004	.0000010	.0000021	.0000040
6							.0000001	.0000001

c/p	.009	.010
1	.2375530	.2602996
2	.0298228	.0361480
3	.0024678	.0033177
4	.0001491	.0002226
5	.0000070	.0000116
6	.0000003	.0000005

n = 31

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0305395	.0601755	.0889339	.1168398	.1439177	.1701914	.1956840	.2204179
2	.0004561	.0017896	.0039490	.0068881	.0105582	.0149154	.0199171	.0255224
3	.0000044	.0000145	.0001140	.0002645	.0005060	.0008562	.0013314	.0019464
4		.0000005	.0000024	.0000074	.0000177	.0000358	.0000649	.0001084
5				.0000002	.0000005	.0000012	.0000025	.0000047
6							.0000001	.0000002

c/p	.009	.010
1	.2444151	.2676966
2	.0316924	.0383895
3	.0027140	.0036460
4	.0001700	.0002535
5	.0000083	.0000137
6	.0000003	.0000006

n = 32

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0315082	.0620551	.0916671	.1203724	.1481941	.1751703	.2013142	.2266344
2	.0004862	.0019063	.0042047	.0073279	.0112250	.0158470	.0211474	.0270816
3	.0000049	.0000380	.0001255	.0002910	.0005542	.0009405	.0014615	.0021350
4		.0000006	.0000027	.0000084	.0000201	.0000407	.0000738	.0001231
5				.0000002	.0000006	.0000014	.0000029	.0000055
6							.0000001	.0000002

c/p	.009	.010
1	.2512153	.2750197
2	.0316069	.0406826
3	.0029748	.0039934
4	.0001929	.0002975
5	.0000097	.0000161
6	.0000004	.0000007

n = 33

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0324774	.0639310	.0943921	.1238909	.1524571	.1801193	.2069050	.2328414
2	.0005172	.0020266	.0044671	.0077801	.0119048	.0168030	.0224084	.0286782
3	.0000053	.0000417	.0001377	.0003192	.0006096	.0010300	.0015993	.0023345
4		.0000006	.0000041	.0000095	.0000228	.0000461	.0000835	.0001392
5			.0000001	.0000002	.0000007	.0000016	.0000034	.0000065
6							.0000001	.0000002

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

$\frac{c}{n}$	.009	.010
1	.2579544	.2822695
2	.0355653	.0430260
3	.0032505	.0043603
4	.0002179	.0003245
5	.0000114	.0000188
6	.0000005	.0000009

n = 34								
c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0334449	.0658031	.0971089	.1273954	.1566949	.1850385	.2124567	.2389706
2	.0005492	.0021504	.0047369	.0082446	.0126126	.0177829	.0237001	.0303115
3	.0000058	.0000457	.0001507	.0003490	.0006661	.0011246	.0017450	.0025453
4		.0000007	.0000035	.0000108	.0000257	.0000520	.0000941	.0001568
5			.0000001	.0000003	.0000008	.0000019	.0000039	.0000075
6						.0000001	.0000001	.0000003

$\frac{c}{n}$	.009	.010
1	.2646328	.2894468
2	.0375668	.0454184
3	.0035413	.0047470
4	.0002452	.0003649
5	.0000132	.0000218
6	.0000006	.0000011

n = 35								
c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0344115	.0676715	.0998176	.1308858	.1609114	.1899283	.2179695	.2450468
2	.0005821	.0022778	.0050140	.0087212	.0133330	.0187864	.0250214	.0319808
3	.0000064	.0000499	.0001645	.0003806	.0007258	.0012246	.0018987	.0027674
4	.0000001	.0000008	.0000039	.0000121	.0000289	.0000585	.0001057	.0001759
5			.0000001	.0000003	.0000009	.0000022	.0000046	.0000087
6						.0000001	.0000002	.0000003
7								

$\frac{c}{n}$	.009	.010
1	.2712511	.2965523
2	.0396104	.0478537
3	.0038476	.0051537
4	.0002749	.0004087
5	.0000153	.0000253
6	.0000007	.0000013
7		.0000001

n = 36								
$\frac{c}{n}$	.001	.002	.003	.004	.005	.006	.007	.008
1	.0353771	.0695362	.1025181	.1343623	.1651068	.1947887	.2234437	.2511063
2	.0006159	.0024085	.0052984	.0092098	.0140709	.0198133	.0263720	.0336855
3	.0000070	.0000544	.0001790	.0004140	.0007888	.0013279	.0020606	.0030011
4	.0000001	.0000009	.0000044	.0000136	.0000324	.0000655	.0001182	.0001966
5			.0000001	.0000003	.0000010	.0000025	.0000053	.0000100
6						.0000001	.0000002	.0000004
7								

$\frac{c}{n}$	.009	.010
1	.2778098	.3035868
2	.0416932	.0503456
3	.0041694	.0055808
4	.0003070	.0004562
5	.0000174	.0000291
6	.0000008	.0000015
7		.0000001

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 37

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0363417	.0711971	.1032135	.1378248	.1692813	.1996300	.2288796	.2570074
2	.0006507	.0025429	.0055901	.0097104	.0148261	.0208631	.0277515	.0354249
3	.0000076	.0000591	.0001944	.0004491	.0009552	.0014408	.0022307	.0032466
4	.0000001	.0000010	.0000049	.0000152	.0000362	.0000731	.0001318	.0002191
5			.0000001	.0000004	.0000012	.0000029	.0000061	.0000115
6						.0000001	.0000002	.0000005
7								

c/p	.009	.010
1	.2843096	.3105509
2	.0438202	.0528780
3	.0045072	.0060284
4	.0003418	.0005074
5	.0000202	.0000334
6	.0000010	.0000018
7		.0000001

n = 38

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0373054	.0732543	.1078949	.1412735	.1734349	.2044223	.2342774	.2630406
2	.0006863	.0026805	.0058889	.0102229	.0155933	.0219357	.0291594	.0371982
3	.0000083	.0000640	.0002105	.0004862	.0009251	.0015574	.0024094	.0035040
4	.0000001	.0000011	.0000055	.0000169	.0000403	.0000813	.0001465	.0002433
5			.0000001	.0000005	.0000014	.0000033	.0000070	.0000132
6						.0000001	.0000003	.0000006
7								

c/p	.009	.010
1	.2907508	.3174454
2	.0459846	.0554548
3	.0048610	.0064969
4	.0003793	.0005626
5	.0000231	.0000381
6	.0000011	.0000021
7		.0000001

n = 39

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0382681	.0751078	.1057112	.1447084	.1775677	.2091958	.2396375	.2689363
2	.0007330	.0028217	.0061949	.0107471	.0163875	.0230306	.0305952	.0390050
3	.0000089	.0000693	.0002276	.0005251	.0009985	.0016796	.0025966	.0037736
4	.0000001	.0000012	.0000061	.0000188	.0000447	.0000901	.0001624	.0002694
5			.0000001	.0000005	.0000016	.0000038	.0000079	.0000150
6						.0000001	.0000003	.0000007
7								

c/p	.009	.010
1	.2971340	.3242710
2	.0481875	.0580747
3	.0052311	.0069863
4	.0004196	.0006220
5	.0000263	.0000434
6	.0000013	.0000025
7	.0000001	.0000001

n = 40

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0392298	.0769576	.1132395	.1481296	.1816799	.2139406	.2449600	.2747848
2	.0007605	.0029662	.0065081	.0112829	.0171934	.0241476	.0320585	.0408444
3	.0000094	.0000748	.0002455	.0005660	.0010754	.0018077	.0027926	.0040334
4	.0000001	.0000014	.0000068	.0000209	.0000495	.0000997	.0001794	.0002974
5			.0000001	.0000005	.0000018	.0000043	.0000090	.0000171
6					.0000001	.0000002	.0000004	.0000008
7								

$$P(r, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

$r \backslash p$	.009	.010
1	.3034598	.3310298
2	.0504281	.0607366
3	.0056177	.0074974
4	.0004629	.0006856
5	.0000299	.0000492
6	.0000016	.0000025
7	.0000001	.0000001

n = 41

$r \backslash p$	.001	.002	.003	.004	.005	.006	.007	.008
1	.0401906	.0788037	.1158998	.1515371	.1857715	.2186569	.2502453	.2805865
2	.0007990	.0031142	.0068283	.0118303	.0180159	.0252863	.0335486	.0427160
3	.0000104	.0000806	.0002643	.0006089	.0011560	.0019418	.0029975	.0043497
4	.0000001	.0000015	.0000075	.0000230	.0000546	.0001099	.0001977	.0003275
5			.0000002	.0000007	.0000020	.0000049	.0000102	.0000193
6					.0000001	.0000002	.0000004	.0000009
7								

$r \backslash p$	.009	.010
1	.3097287	.3377180
2	.0527053	.0634395
3	.0060210	.0080298
4	.0005093	.0007537
5	.0000338	.0000555
6	.0000018	.0000033
7	.0000001	.0000002

n = 42

$r \backslash p$	.001	.002	.003	.004	.005	.006	.007	.008
1	.0411504	.0806461	.1185521	.1549309	.1898426	.2233450	.2554936	.2863418
2	.0008384	.0032656	.0071555	.0123891	.0188546	.0264465	.0350657	.0446189
3	.0000111	.0000866	.0002840	.0006539	.0012403	.0020818	.0032113	.0046567
4	.0000001	.0000017	.0000083	.0000254	.0000601	.0001209	.0002173	.0003597
5			.0000002	.0000008	.0000023	.0000055	.0000115	.0000218
6					.0000001	.0000002	.0000005	.0000011
7								

$r \backslash p$	.009	.010
1	.3159411	.3443408
2	.0550186	.0661823
3	.0064411	.0085839
4	.0005589	.0008265
5	.0000381	.0000625
6	.0000021	.0000039
7	.0000001	.0000002

n = 43

$r \backslash p$	.001	.002	.003	.004	.005	.006	.007	.008
1	.0421094	.0824848	.1211964	.1583114	.1938934	.2280049	.2607051	.2920811
2	.0008787	.0034203	.0074897	.0129893	.0197096	.0276279	.0366087	.0465327
3	.0000120	.0000930	.0003046	.0007007	.0013284	.0022280	.0034343	.0049764
4	.0000001	.0000019	.0000091	.0000279	.0000660	.0001327	.0002383	.0003940
5			.0000002	.0000009	.0000026	.0000068	.0000130	.0000243
6					.0000001	.0000002	.0000006	.0000013
7								.0000001

$r \backslash p$	.009	.010
1	.3220976	.3508974
2	.0573649	.0689639
3	.0068783	.0091598
4	.0006119	.0009041
5	.0000427	.0000701
6	.0000024	.0000044
7	.0000001	.0000002

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 44

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0430671	.0843198	.1238329	.1616779	.1979239	.2326369	.2658802	.2977147
2	.0009199	.0035785	.0078308	.0135407	.0205805	.0286302	.0381774	.0485167
3	.0000128	.0000996	.0003261	.0007498	.0014203	.0023804	.0036665	.0053090
4	.0000001	.0000020	.0000100	.0000306	.0000723	.0001452	.0002606	.0004307
5			.0000002	.0000010	.0000029	.0000069	.0000145	.0000274
6					.0000001	.0000003	.0000007	.0000014
7								.0000001

c/p	.009	.010
1	.3281988	.3573884
2	.0597494	.0717832
3	.0073327	.0097579
4	.0006683	.0009866
5	.0000479	.0000785
6	.0000028	.0000051
7	.0000001	.0000003

n = 45

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0440240	.0861512	.1264614	.1650312	.2019343	.2372411	.2710190	.3033330
2	.0009621	.0037400	.0081788	.0141333	.0214672	.0300530	.0397713	.0508103
3	.0000139	.0001066	.0003486	.0008009	.0015141	.0025391	.0039081	.0056546
4	.0000001	.0000022	.0000109	.0000335	.0000791	.0001587	.0002845	.0004697
5			.0000003	.0000011	.0000032	.0000078	.0000163	.0000307
6					.0000001	.0000003	.0000008	.0000016
7								.0000001

c/p	.009	.010
1	.3342450	.3638145
2	.0621655	.0746393
3	.0078045	.0103781
4	.0007282	.0010743
5	.0000535	.0000876
6	.0000032	.0000058
7	.0000002	.0000003

n = 46

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0449800	.0879789	.1290820	.1683711	.2059247	.2418176	.2761819	.3099063
2	.0010051	.0039048	.0085336	.0147369	.0223695	.0312962	.0413900	.0525329
3	.0000147	.0001139	.0003721	.0008542	.0016158	.0027042	.0041592	.0060135
4	.0000002	.0000024	.0000120	.0000365	.0000862	.0001729	.0003098	.0005112
5			.0000003	.0000012	.0000036	.0000087	.0000181	.0000342
6					.0000001	.0000004	.0000009	.0000019
7								.0000001

c/p	.009	.010
1	.3402368	.3701764
2	.0646142	.0775310
3	.0082937	.0110207
4	.0007919	.0011674
5	.0000595	.0000974
6	.0000037	.0000066
7	.0000002	.0000004

n = 47

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0459350	.0888029	.1316947	.1716276	.2098950	.2463667	.2811891	.3144351
2	.0010491	.0040729	.0090953	.0153514	.0232873	.0328293	.0439332	.0564839
3	.0000157	.0001214	.0003966	.0009098	.0017104	.0028258	.0043198	.0063856
4	.0000002	.0000027	.0000130	.0000398	.0000939	.0001881	.0003368	.0005588
5			.0000003	.0000014	.0000040	.0000097	.0000202	.0000380
6					.0000001	.0000004	.0000010	.0000021
7								.0000001

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

c/p	.009	.010
1	.3461746	.3764746
2	.0670948	.0804575
3	.0088006	.0116858
4	.0008594	.0012659
5	.0000661	.0001081
6	.0000042	.0000076
7	.0000002	.0000004

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c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0468891	.0916233	.1342990	.1750108	.2138456	.2506885	.2862207	.3199196
2	.0010940	.0042444	.0092637	.0159768	.0242204	.0338421	.0447003	.0566627
3	.0000167	.0001293	.0004821	.0009675	.0018274	.0030539	.0046901	.0067712
4	.0000002	.0000029	.0000142	.0000433	.0001020	.0002043	.0003654	.0006019
5		.0000001	.0000004	.0000015	.0000045	.0000107	.0000224	.0000421
6					.0000002	.0000005	.0000011	.0000024
7								.0000001

c/p	.009	.010
1	.3520591	.3827099
2	.0696065	.0834177
3	.0093253	.0123736
4	.0009309	.0013701
5	.0000733	.0001197
6	.0000047	.0000086
7	.0000003	.0000005

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0478422	.0934401	.1368967	.1783108	.2177763	.2553832	.2912178	.3253602
2	.0011398	.0044191	.0096388	.0164129	.0251685	.0351444	.0463409	.0587687
3	.0000178	.0001376	.0004486	.0010276	.0019394	.0032386	.0049701	.0071704
4	.0000002	.0000032	.0000154	.0000470	.0001106	.0002213	.0003956	.0006312
5		.0000001	.0000004	.0000017	.0000050	.0000119	.0000246	.0000468
6					.0000002	.0000005	.0000013	.0000027
7							.0000001	.0000001

c/p	.009	.010
1	.3578905	.3888828
2	.0721486	.0864106
3	.0098678	.0130840
4	.0010065	.0014801
5	.0000810	.0001322
6	.0000053	.0000097
7	.0000003	.0000006

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0487944	.0952532	.1394860	.1815975	.2216874	.2598509	.2961787	.3307574
2	.0011865	.0045972	.0100208	.0172597	.0261315	.0364658	.0481047	.0609014
3	.0000189	.0001461	.0004762	.0010899	.0020555	.0034300	.0052601	.0075831
4	.0000002	.0000034	.0000167	.0000509	.0001198	.0002395	.0004277	.0007034
5		.0000001	.0000005	.0000019	.0000055	.0000132	.0000274	.0000514
6				.0000001	.0000002	.0000006	.0000014	.0000031
7							.0000001	.0000002

c/p	.009	.010
1	.3636695	.3949939
2	.0747203	.0894353
3	.0104283	.0138173
4	.0010862	.0015962
5	.0000893	.0001457
6	.0000060	.0000109
7	.0000003	.0000007

$$P(c, r, p) = \sum_{r=0}^c \binom{n}{r} p^r (1-p)^{n-r}$$

n = 51

c \ p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0447454	.0470627	.1420676	.1848712	.2255740	.2642918	.3011054	.3361113
2	.0012341	.0047745	.0104090	.0179171	.0271093	.0378063	.0498412	.0630603
3	.0000201	.0001550	.0005048	.0011546	.0021759	.0036282	.0055600	.0080097
4	.0000002	.0000037	.0000181	.0000551	.0001295	.0002586	.0004615	.0007584
5		.0000001	.0000005	.0000021	.0000041	.00000145	.0000302	.0000567
6				.0000001	.0000002	.0000007	.0000016	.0000035
7							.0000001	.0000008

c \ p	.009	.010
1	.1693965	.4010440
2	.0773204	.0924909
3	.0110070	.0145735
4	.0011703	.0017184
5	.0000983	.0001602
6	.0000068	.0000122
7	.0000004	.0000008

n = 52

c \ p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0506958	.0988686	.1446414	.1881317	.2294511	.2687060	.3059977	.3414224
2	.0012826	.0049631	.0108039	.0185849	.0281017	.0391651	.0516001	.0652447
3	.0000213	.0001643	.0005346	.0012216	.0023006	.0038333	.0058700	.0084501
4	.0000003	.0000040	.0000195	.0000595	.0001397	.0002788	.0004972	.0008164
5		.0000001	.0000006	.0000023	.0000067	.0000160	.0000332	.0000623
6				.0000001	.0000003	.0000007	.0000018	.0000039
7							.0000001	.0000008
8								

c \ p	.009	.010
1	.3750719	.4070336
2	.0799495	.0955764
3	.0116038	.0153526
4	.0012588	.0018469
5	.0001079	.0001758
6	.0000076	.0000137
7	.0000004	.0000009
8		.0000001

n = 53

c \ p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0516451	.1006708	.1472075	.1913791	.2333039	.2730938	.3108557	.3466910
2	.0013320	.0051509	.0112054	.0192631	.0291084	.0408423	.0533808	.0674541
3	.0000224	.0001739	.0005854	.0012911	.0024296	.0040453	.0061901	.0089045
4	.0000003	.0000043	.0000211	.0000641	.0001505	.0003001	.0005348	.0008775
5		.0000001	.0000006	.0000025	.0000073	.0000176	.0000365	.0000683
6				.0000001	.0000003	.0000008	.0000020	.0000044
7							.0000001	.0000008
8								

c \ p	.009	.010
1	.3806943	.4129632
2	.0826056	.0986910
3	.0122189	.0161549
4	.0013519	.0019820
5	.0001183	.0001925
6	.0000085	.0000153
7	.0000005	.0000010
8		.0000001

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 54

c \ p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0525035	.1024695	.1497658	.1946136	.2371373	.2774552	.3156797	.3519175
2	.0013823	.0051419	.0116135	.0199515	.0301204	.0419376	.0551832	.0696880
3	.0000236	.0001838	.0005973	.0013630	.0025630	.0042643	.0065204	.0093728
4	.0000003	.0000047	.0000227	.0000690	.0001619	.0003226	.0005744	.0009417
5		.0000001	.0000007	.0000028	.0000081	.0000193	.0000400	.0000748
6				.0000001	.0000003	.0000009	.0000023	.0000049
7							.0000001	.0000003
8								

c \ p	.009	.010
1	.3862700	.4188336
2	.0852884	.1018337
3	.0128524	.0169802
4	.0014497	.0021237
5	.0001294	.0002104
6	.0000095	.0000171
7	.0000006	.0000012
8		.0000001

n = 55

c \ p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0535409	.1042645	.1523165	.1978352	.2409516	.2817905	.3204699	.3571022
2	.0014335	.0055362	.0120279	.0206502	.0311644	.0433507	.0570066	.0719459
3	.0000252	.0001942	.0006303	.0014373	.0027008	.0044903	.0068611	.0098554
4	.0000003	.0000050	.0000244	.0000742	.0001739	.0003463	.0006160	.0010091
5		.0000001	.0000007	.0000030	.0000088	.0000211	.0000437	.0000817
6				.0000001	.0000004	.0000011	.0000025	.0000054
7							.0000001	.0000003
8								

c \ p	.009	.010
1	.3917936	.4246453
2	.0879972	.1050037
3	.0135043	.0178298
4	.0015523	.0022723
5	.0001413	.0002295
6	.0000106	.0000190
7	.0000007	.0000013
8		.0000001

n = 56

c \ p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0544874	.1060560	.1548596	.2010438	.2447469	.2860998	.3252267	.3622453
2	.0014854	.0057336	.0124488	.0213589	.0322134	.0447814	.0588509	.0742871
3	.0000266	.0002048	.0006645	.0015142	.0028431	.0047235	.0072121	.0103521
4	.0000004	.0000054	.0000263	.0000796	.0001865	.0003711	.0006597	.0010799
5		.0000001	.0000008	.0000033	.0000097	.0000230	.0000477	.0000891
6				.0000001	.0000004	.0000018	.0000028	.0000060
7						.0000001	.0000001	.0000003
8								

c \ p	.009	.010
1	.3972674	.4303988
2	.0907314	.1082001
3	.0141747	.0187005
4	.0016599	.0024279
5	.0001540	.0002499
6	.0000117	.0000212
7	.0000008	.0000015
8		.0000001

$$P(o, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 57

p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0554389	.1078439	.1573950	.2042397	.2485232	.2903832	.3299501	.3673474
2	.0015386	.0059143	.0128760	.0220777	.0332760	.0462293	.0607155	.0765313
3	.0000281	.0002159	.0006999	.0015936	.0029900	.0049638	.0075735	.0108631
4	.0000004	.0000058	.0000282	.0000854	.0001998	.0003972	.0007056	.0011541
5		.0000001	.0000009	.0000036	.0000105	.0000251	.0000520	.0000971
6				.0000001	.0000005	.0000013	.0000031	.0000067
7						.0000001	.0000002	.0000004
8								

p	.009	.010
1	.4026920	.4360948
2	.0914902	.1114221
3	.0148637	.0195955
4	.0017725	.0025908
5	.0001675	.0002717
6	.0000130	.0000234
7	.0000009	.0000017
8		.0000001

n = 56

p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0563774	.1096282	.1599228	.2074227	.2522805	.2946409	.3346404	.3724086
2	.0015925	.0061381	.0133096	.0228063	.0341523	.0476942	.0626002	.0788578
3	.0000296	.0002273	.0007364	.0016755	.0031414	.0052114	.0079455	.0113884
4	.0000004	.0000062	.0000302	.0000914	.0002138	.0004246	.0007537	.0012318
5		.0000001	.0000010	.0000039	.0000115	.0000273	.0000566	.0001054
6				.0000001	.0000005	.0000014	.0000035	.0000074
7						.0000001	.0000002	.0000004
8								

p	.009	.010
1	.4080678	.4417332
2	.0922730	.1146689
3	.0155714	.0205138
4	.0018904	.0027606
5	.0001820	.0002949
6	.0000144	.0000259
7	.0000010	.0000019
8	.0000001	.0000001

n = 55

p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0573211	.1114089	.1624431	.2105930	.2560191	.2988730	.3392979	.3774893
2	.0016473	.0061451	.0137494	.0235448	.0354419	.0491759	.0645044	.0813062
3	.0000312	.0002192	.0007741	.0017600	.0031975	.0054661	.0081281	.0119882
4	.0000004	.0000067	.0000323	.0000977	.0002284	.0004534	.0008040	.0013130
5		.0000001	.0000011	.0000043	.0000125	.0000297	.0000614	.0001145
6				.0000002	.0000006	.0000016	.0000039	.0000082
7						.0000001	.0000002	.0000005
8								

p	.009	.010
1	.4133952	.4473165
2	.0990792	.1179395
3	.0162977	.0214553
4	.0020135	.0029382
5	.0001973	.0003196
6	.0000159	.0000286
7	.0000011	.0000022
8	.0000001	.0000001

$$P(a, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 60

a/p	.001	.003	.005	.004	.005	.006	.007	.008
1	.0582637	.1131861	.1649557	.2137506	.2597390	.3030798	.3439229	.3824099
2	.0017030	.0065552	.0141958	.0242930	.0345448	.0506741	.0664280	.0835760
3	.0000328	.0002514	.0008131	.0018472	.0034502	.0057266	.0087214	.0124824
4	.0000005	.0000071	.0000345	.0001044	.0002438	.0004834	.0008527	.0013979
5		.0000003	.0000012	.0000047	.0000136	.0000323	.0000666	.0001241
6				.0000002	.0000006	.0000018	.0000043	.0000091
7						.0000001	.0000002	.0000006
8								

a/p	.009	.010
1	.4106746	.4538434
2	.1019080	.1212333
3	.0170427	.0224202
4	.0021491	.0031233
5	.0003137	.0005458
6	.0000178	.0000315
7	.0000014	.0000024
8	.0000001	.0000002

n = 61

a/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0592055	.1149598	.1674609	.2168956	.2634403	.3072613	.3485154	.3873506
2	.0017596	.0067685	.0146478	.0250508	.0376608	.0521085	.0683705	.0859666
3	.0000345	.0002640	.0008532	.0019370	.0036236	.0059983	.0091253	.0130512
4	.0000008	.0000076	.0000362	.0001114	.0002598	.0005149	.0009117	.0014866
5		.0000002	.0000013	.0000051	.0000147	.0000350	.0000722	.0001343
6				.0000002	.0000007	.0000020	.0000047	.0000100
7						.0000001	.0000003	.0000006
8								

a/p	.009	.010
1	.4239066	.4583149
2	.1047509	.1245494
3	.0170065	.0234083
4	.0022742	.0033163
5	.0002310	.0003735
6	.0000193	.0000347
7	.0000014	.0000027
8	.0000001	.0000002

n = 62

a/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0601463	.1167398	.1699585	.2200281	.2671231	.3114177	.3530758	.3922518
2	.0018170	.0069848	.0151062	.0258182	.0387697	.0537189	.0703315	.0883777
3	.0000362	.0002770	.0008946	.0020224	.0037918	.0062754	.0095400	.0136345
4	.0000005	.0000081	.0000393	.0001187	.0002766	.0005478	.0009642	.0015791
5		.0000002	.0000014	.0000055	.0000160	.0000379	.0000780	.0001451
6				.0000002	.0000008	.0000022	.0000052	.0000110
7						.0000001	.0000003	.0000007
8								

a/p	.009	.010
1	.4290914	.4637318
2	.1076313	.1278870
3	.0185891	.0244197
4	.0024159	.0035172
5	.0002495	.0004030
6	.0000218	.0000381
7	.0000015	.0000030
8	.0000001	.0000000

$$P(0, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 63

$\frac{0}{p}$	.001	.002	.003	.004	.005	.006	.007	.008
1	.0610861	.1184964	.1724486	.2231479	.2707876	.3155492	.3576043	.3971138
2	.0018753	.0072043	.0155708	.0265950	.0399313	.0552651	.0723107	.0908087
3	.0000380	.0003904	.0009372	.0021246	.0039668	.0065401	.0099456	.0142384
4	.0000004	.0000087	.0000419	.0001263	.0002942	.0005882	.0010898	.0016736
5		.0000002	.0000015	.0000059	.0000173	.0000409	.0000843	.0001266
6				.0000002	.0000008	.0000024	.0000057	.0000121
7						.0000001	.0000003	.0000008
8								

$\frac{0}{p}$	.009	.010
1	.4342294	.4690945
2	.1105244	.1312455
3	.0193905	.0254544
4	.0025615	.0037262
5	.0002680	.0004341
6	.0000233	.0000417
7	.0000017	.0000034
8	.0000001	.0000002

n = 64

$\frac{0}{p}$	.001	.002	.003	.004	.005	.006	.007	.008
1	.0620250	.1202594	.1749313	.2262554	.2744336	.3196559	.3621010	.4019369
2	.0019348	.0074269	.0160414	.0273612	.0410856	.0568268	.0743077	.0932591
3	.0000398	.0003904	.0009811	.0022224	.0041486	.0068523	.0104020	.0146430
4	.0000004	.0000092	.0000446	.0001343	.0003126	.0006180	.0010918	.0017760
5		.0000002	.0000016	.0000064	.0000184	.0000442	.0000849	.0001268
6				.0000003	.0000009	.0000026	.0000062	.0000132
7						.0000001	.0000004	.0000009
8								

$\frac{0}{p}$	.009	.010
1	.4393215	.4744035
2	.1134374	.1346240
3	.0202107	.0258123
4	.0027130	.0038135
5	.0002896	.0004670
6	.0000255	.0000456
7	.0000019	.0000031
8	.0000001	.0000003

n = 65

$\frac{0}{p}$	.001	.002	.003	.004	.005	.006	.007	.008
1	.0634630	.1280189	.1774065	.2293503	.2780614	.3237380	.3665463	.4067814
2	.0019944	.0076526	.0165181	.0281747	.0422523	.0584018	.0763223	.0957886
3	.0000417	.0003185	.0009263	.0021211	.0041333	.0071581	.0108493	.0154784
4	.0000006	.0000092	.0000474	.0001427	.0003318	.0006554	.0011529	.0018606
5		.0000002	.0000017	.0000069	.0000201	.0000476	.0000979	.0001816
6			.0000001	.0000003	.0000010	.0000028	.0000068	.0000145
7						.0000001	.0000004	.0000010
8								.0000001

$\frac{0}{p}$	.009	.010
1	.4443676	.4796595
2	.1163707	.1380218
3	.0210497	.0275934
4	.0028704	.0041692
5	.0003114	.0005018
6	.0000279	.0000498
7	.0000081	.0000048
8	.0000001	.0000003

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$$P(r, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 66

r/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0619000	.1237744	.1798748	.2324328	.2816711	.3277956	.3710004	.4114474
2	.0030556	.0078813	.0170007	.0337014	.0434314	.0599954	.0783540	.0988165
3	.0000437	.0003331	.0010720	.0024265	.0045390	.0074596	.0113076	.0161144
4	.0000000	.0000104	.0000503	.0001514	.0003518	.0006944	.0013840	.0025093
5		.0000003	.0000019	.0000075	.0000217	.0000513	.0001053	.0002084
6			.0000001	.0000003	.0000011	.0000031	.0000075	.0000154
7						.0000002	.0000002	.0000011
8							.0000000	.0000001

r/p	.009	.010
1	.4493683	.4848622
2	.1193227	.1414381
3	.0319076	.0386977
4	.0010340	.0044035
5	.0003344	.0005385
6	.0000304	.0000544
7	.0000093	.0000046
8	.0000008	.0000003

n = 67

r/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0648361	.1255273	.1823346	.2355038	.2851628	.3310380	.3754034	.4161759
2	.0031175	.0078131	.0174094	.0337952	.0446286	.0616086	.0840085	.1007825
3	.0000457	.0003482	.0011300	.0025327	.0047174	.0077742	.0117769	.0167718
4	.0000007	.0000111	.0000534	.0001605	.0003786	.0006930	.0013954	.0025023
5		.0000003	.0000020	.0000080	.0000233	.0000551	.0001132	.0002096
6			.0000001	.0000003	.0000012	.0000034	.0000081	.0000178
7					.0000001	.0000002	.0000005	.0000013
8							.0000000	.0000001

r/p	.009	.010
1	.4543240	.4900143
2	.1222911	.1448724
3	.0317043	.0398251
4	.0010039	.0046464
5	.0003587	.0005771
6	.0000331	.0000592
7	.0000086	.0000051
8	.0000002	.0000004

n = 68

r/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0657713	.1272762	.1847870	.2385612	.2888364	.3358374	.3797753	.4208465
2	.0031802	.0078179	.0179839	.0338181	.0458256	.0632240	.0864575	.1032461
3	.0000477	.0003630	.0011607	.0026418	.0049170	.0080978	.0122573	.0174438
4	.0000008	.0000118	.0000566	.0001700	.0003944	.0007773	.0013647	.0022197
5		.0000003	.0000023	.0000087	.0000251	.0000598	.0001214	.0002247
6			.0000001	.0000004	.0000013	.0000037	.0000089	.0000188
7					.0000001	.0000002	.0000005	.0000013
8							.0000000	.0000001

r/p	.009	.010
1	.4592351	.4951141
2	.1252814	.1483234
3	.0316744	.0399756
4	.0010801	.0048902
5	.0003843	.0006178
6	.0000341	.0000644
7	.0000024	.0000037
8	.0000002	.0000004

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 69

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0667055	.1290217	.1872333	.2416069	.2923923	.3398228	.3841171	.4254767
2	.0022438	.0085858	.0184843	.0314498	.0470408	.0648597	.0845487	.1057870
3	.0000499	.0003797	.0012301	.0027537	.0051215	.0084296	.0127480	.0181293
4	.0000008	.0000125	.0000599	.0001799	.0004170	.0008212	.0014450	.0023415
5		.0000003	.0000023	.0000093	.0000269	.0000635	.0001302	.0002407
6			.0000001	.0000004	.0000014	.0000040	.0000097	.0000204
7					.0000001	.0000002	.0000006	.0000015
8								.0000001

c/p	.009	.010
1	.4641020	.5001630
2	.1282870	.1517917
3	.0215943	.0321491
4	.0015628	.0051590
5	.0004113	.0006606
6	.0000392	.0000699
7	.0000032	.0000063
8	.0000002	.0000005

n = 70

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0676388	.1307636	.1895710	.2446405	.2959303	.3437839	.3884283	.4300759
2	.0023082	.0088267	.0189905	.0328905	.0482676	.0648094	.0826457	.1018345
3	.0000521	.0003962	.0012719	.0028685	.0053311	.0087672	.0132514	.0188305
4	.0000009	.0000132	.0000634	.0001901	.0004405	.0008668	.0015241	.0024678
5		.0000003	.0000025	.0000100	.0000269	.0000680	.0001394	.0002575
6			.0000001	.0000004	.0000016	.0000044	.0000105	.0000222
7					.0000001	.0000002	.0000007	.0000014
8								.0000001

c/p	.009	.010
1	.4689251	.5051613
2	.1313093	.1552754
3	.0255276	.0333455
4	.0037521	.0054289
5	.0004397	.0007056
6	.0000426	.0000758
7	.0000035	.0000069
8	.0000002	.0000005

n = 71

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0685712	.1325021	.1921028	.2476619	.2994507	.3477212	.3927093	.4346383
2	.0023736	.0090705	.0195028	.0331399	.0495059	.0681731	.0887581	.1109183
3	.0000543	.0004130	.0013251	.0029861	.0055458	.0091136	.0137452	.0195466
4	.0000009	.0000140	.0000670	.0002009	.0004630	.0009142	.0016062	.0025987
5		.0000004	.0000027	.0000107	.0000309	.0000728	.0001491	.0002751
6			.0000001	.0000005	.0000017	.0000048	.0000114	.0000241
7					.0000001	.0000003	.0000007	.0000018
8								.0000001

c/p	.009	.010
1	.4737047	.5101097
2	.1343478	.1587743
3	.0264796	.0345648
4	.0039481	.0057080
5	.0004695	.0007528
6	.0000461	.0000821
7	.0000037	.0000076
8	.0000003	.0000006

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$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 72

c \ p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0695026	.1342371	.1945262	.2506713	.3029534	.3516348	.3969603	.4391582
2	.0024398	.0093174	.0200204	.0339979	.0507556	.0698504	.0908858	.1135081
3	.0000566	.0004303	.0013796	.0031068	.0057656	.0094680	.0142901	.0202776
4	.0000010	.0000148	.0000708	.0002120	.0004904	.0009634	.0016913	.0027348
5		.0000004	.0000029	.0000115	.0000331	.0000779	.0001593	.0002937
6			.0000001	.0000005	.0000018	.0000052	.0000124	.0000261
7					.0000001	.0000003	.0000008	.0000020
8								.0000001

c \ p	.009	.010
1	.4784414	.5150086
2	.1374020	.1622876
3	.0274504	.0356069
4	.0041509	.0059966
5	.0005008	.0008024
6	.0000499	.0000888
7	.0000042	.0000083
8	.0000003	.0000007

n = 73

c \ p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0704331	.1359686	.1969427	.2536686	.3064386	.3555250	.4011816	.4436449
2	.0025068	.0095672	.0205439	.0348646	.0520166	.0715411	.0930283	.1161133
3	.0000590	.0004841	.0014355	.0032303	.0059905	.0098303	.0148263	.0210235
4	.0000010	.0000156	.0000747	.0002236	.0005167	.0010145	.0017795	.0028746
5		.0000004	.0000031	.0000123	.0000354	.0000932	.0001700	.0003133
6			.0000001	.0000006	.0000020	.0000056	.0000134	.0000282
7					.0000001	.0000003	.0000009	.0000022
8							.0000001	.0000001
9								

c \ p	.009	.010
1	.4831354	.5198585
2	.1404714	.1658148
3	.0284400	.0370717
4	.0043606	.0062947
5	.0005336	.0008543
6	.0000540	.0000960
7	.0000046	.0000091
8	.0000003	.0000008
9		.0000001

n = 74

c \ p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0713627	.1376967	.1993518	.2564539	.3092064	.3593919	.4053733	.4480957
2	.0025747	.0098200	.0210731	.0357399	.0532887	.0732450	.0951854	.1187335
3	.0000615	.0004663	.0014928	.0033569	.0062207	.0102005	.0153737	.0217842
4	.0000011	.0000165	.0000788	.0002356	.0005441	.0010673	.0018708	.0030198
5		.0000005	.0000033	.0000131	.0000378	.0000988	.0001812	.0003337
6			.0000001	.0000006	.0000022	.0000061	.0000145	.0000305
7					.0000001	.0000004	.0000010	.0000024
8							.0000001	.0000002
9								

c \ p	.009	.010
1	.4877872	.5246600
2	.1415554	.1693553
3	.0204483	.0338591
4	.0045773	.0066025
5	.0005681	.0009087
6	.0000583	.0001035
7	.0000051	.00001
8	.0000004	.0000000
9		.0000001

$$P(c,n,p) = \sum_{r=0}^c \binom{n}{r} p^r (1-p)^{n-r}$$

n = 75

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.07222913	.1394213	.2017538	.2596273	.3133569	.3632355	.4095357	.4525110
2	.0026435	.0100758	.0216079	.0366235	.0545718	.0749619	.0973567	.1213684
3	.0000640	.0004850	.0015516	.0034864	.0064560	.0105788	.0159324	.0228598
4	.0000011	.0000174	.0000831	.0002481	.0005725	.0011221	.0019653	.0031699
5		.0000005	.0000035	.0000140	.0000403	.0000947	.0001931	.0003852
6			.0000001	.0000007	.0000023	.0000066	.0000157	.0000329
7					.0000001	.0000004	.0000011	.0000024
8							.0000001	.0000002
9								

c/p	.009	.010
1	.4923071	.5294134
2	.1466535	.1729083
3	.0304752	.0396691
4	.0048011	.0069200
5	.0006042	.0009657
6	.0000629	.0001116
7	.0000056	.0000110
8	.0000004	.0000009
9		.0000001

n = 76

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0732190	.1411424	.2041485	.2625888	.3167901	.3670561	.4136490	.4568909
2	.0027132	.0103145	.0221484	.0375155	.0559657	.0766915	.0997420	.1240176
3	.0000664	.0005042	.0016117	.0036182	.0066946	.0109551	.0165023	.0233592
4	.0000012	.0000193	.0000875	.0002610	.0006019	.0011769	.0020431	.0033250
5		.0000005	.0000038	.0000149	.0000430	.0001006	.0002055	.0003778
6			.0000001	.0000007	.0000025	.0000071	.0000169	.0000355
7					.0000001	.0000004	.0000012	.0000028
8							.0000001	.0000002
9								

c/p	.009	.010
1	.4969655	.5341192
2	.1497652	.1764734
3	.0315208	.0410015
4	.0050322	.0072475
5	.0006419	.0010252
6	.0000670	.0001201
7	.0000061	.0000120
8	.0000005	.0000010
9		.0000001

n = 77

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0741458	.1428602	.2065361	.2655385	.3202063	.3708538	.4177733	.4612358
2	.0027837	.0105961	.0226944	.0384158	.0571704	.0784337	.1017408	.1266806
3	.0000692	.0005239	.0016734	.0037545	.0069484	.0113595	.0170836	.0241556
4	.0000013	.0000193	.0000920	.0002745	.0006324	.0012376	.0021642	.0034852
5		.0000006	.0000040	.0000159	.0000458	.0001073	.0002185	.0004013
6			.0000001	.0000008	.0000027	.0000077	.0000182	.0000382
7					.0000001	.0000005	.0000013	.0000028
8							.0000001	.0000002
9								

c/p	.009	.010
1	.5014928	.5387780
2	.1526900	.1800498
3	.0325850	.0423562
4	.0052706	.0075851
5	.0006814	.0010874
6	.0000729	.0001292
7	.0000064	.0000130
8	.0000005	.0000011
9		.0000001

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$$P(n, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 78

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0750717	.1445744	.2089165	.2684763	.3236051	.3746286	.4218429	.4655459
2	.0028550	.0108606	.0232459	.0393243	.0584855	.0801682	.1039531	.1293570
3	.0000719	.0005440	.0017364	.0038932	.0071936	.0117619	.0176762	.0249758
4	.0000013	.0000203	.0000968	.0002884	.0006639	.0012983	.0022686	.0036506
5		.0000006	.0000043	.0000170	.0000487	.0001141	.0002321	.0004260
6			.0000002	.0000008	.0000029	.0000083	.0000196	.0000411
7					.0000002	.0000005	.0000014	.0000034
8							.0000001	.0000002
9								

c/p	.009	.010
1	.5059794	.5433903
2	.1560274	.1836371
3	.0336676	.0437331
4	.0055164	.0079328
5	.0007227	.0011524
6	.0000784	.0001388
7	.0000072	.0000142
8	.0000006	.0000013
9		.0000001

n = 79

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0759966	.1442853	.2112897	.2714024	.3269871	.3783809	.4258859	.4698215
2	.0029273	.0111281	.0238029	.0402409	.0598111	.0819549	.1061783	.1320465
3	.0000747	.0005647	.0018010	.0040349	.0074500	.0121725	.0182802	.0258108
4	.0000014	.0000213	.0001017	.0003028	.0006966	.0013611	.0023765	.0038312
5		.0000006	.0000046	.0000180	.0000518	.0001212	.0002464	.0004518
6			.0000002	.0000009	.0000032	.0000089	.0000211	.0000442
7					.0000002	.0000006	.0000015	.0000037
8							.0000001	.0000003
9								

c/p	.009	.010
1	.5104256	.5479563
2	.1591770	.1872346
3	.0347690	.0451322
4	.0057698	.0082908
5	.0007659	.0012202
6	.0000842	.0001489
7	.0000079	.0000154
8	.0000006	.0000014
9		.0000001

n = 80

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0766206	.1479927	.2136558	.2743168	.3303522	.3821106	.4299147	.4740625
2	.0030003	.0113984	.0243654	.0411656	.0611470	.0837334	.1084164	.1347487
3	.0000776	.0005858	.0018670	.0041737	.0077110	.0125912	.0188954	.0266607
4	.0000015	.0000224	.0001068	.0003177	.0006730	.0014260	.0024878	.0039971
5		.0000007	.0000048	.0000192	.0000550	.0001286	.0002613	.0004788
6			.0000002	.0000010	.0000034	.0000096	.0000227	.0000475
7					.0000002	.0000006	.0000017	.0000040
8							.0000001	.0000003
9								

c/p	.009	.010
1	.5148318	.5524768
2	.1623382	.1908419
3	.0358887	.0465532
4	.0067308	.0096592
5	.0008109	.0012909
6	.0000904	.0001596
7	.0000086	.0000168
8	.0000007	.0000015
9	.0000001	.0000001

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 81

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0770437	.1496967	.2160149	.2772195	.3337004	.3858179	.4339052	.4782704
2	.0030743	.0116716	.0249332	.0420982	.0624931	.0855237	.1106669	.1374632
3	.0000805	.0006074	.0019345	.0043277	.0079700	.0130180	.0195221	.0275254
4	.0000016	.0000235	.0001121	.0003332	.0007653	.0014930	.0026026	.0041784
5		.0000037	.0000052	.0000204	.0000584	.0001364	.0002769	.0005069
6			.0000002	.0000010	.0000037	.0000103	.0000244	.0000509
7					.0000002	.0000007	.0000018	.0000043
8							.0000001	.0000003
9								

c/p	.009	.010
1	.5191983	.5569320
2	.1655106	.1944582
3	.0370267	.0479961
4	.0062925	.0090181
5	.0008579	.0013646
6	.0000968	.0001709
7	.0000093	.0000182
8	.0000008	.0000017
9	.0000001	.0000001

n = 82

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0787658	.1511973	.2183668	.2801106	.3370319	.3895030	.4378679	.4824443
2	.0031490	.0119476	.0255065	.0430387	.0638491	.0873254	.1129295	.1401897
3	.0000835	.0006895	.0020034	.0044787	.0082516	.0134831	.0201601	.0284049
4	.0000016	.0000247	.0001175	.0003492	.0007803	.0013621	.0022211	.0034382
5		.0000008	.0000035	.0000216	.0000619	.0001445	.0002931	.0005363
6			.0000002	.0000011	.0000040	.0000111	.0000261	.0000546
7					.0000002	.0000007	.0000020	.0000047
8							.0000001	.0000004
9								

c/p	.009	.010
1	.5235255	.5613825
2	.1686938	.1980832
3	.0381831	.0494607
4	.0065760	.0094277
5	.0009069	.0014413
6	.0001037	.0001829
7	.0000101	.0000197
8	.0000008	.0000018
9	.0000001	.0000002

n = 83

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0796871	.1530946	.2207117	.2829902	.3403468	.3931660	.4418028	.4865847
2	.0032244	.0122365	.0260851	.0439869	.0652150	.0891385	.1153041	.1439277
3	.0000865	.0006432	.0020740	.0046330	.0085246	.0138963	.0208095	.0292998
4	.0000017	.0000259	.0001232	.0003657	.0008386	.0016335	.0028431	.0045575
5		.0000008	.0000038	.0000229	.0000656	.0001531	.0003101	.0005669
6			.0000002	.0000012	.0000042	.0000112	.0000290	.0000584
7				.0000001	.0000002	.0000008	.0000021	.0000051
8							.0000001	.0000004
9								

c/p	.009	.010
1	.5270138	.5657687
2	.1718873	.2017161
3	.0393577	.0509469
4	.0068695	.0098290
5	.0009579	.0015212
6	.0001109	.0001955
7	.0000109	.0000214
8	.0000009	.0000020
9	.0000001	.0000002

$$P(c, n, p) = \sum_{x=0}^n \binom{n}{x} p^x (1-p)^{n-x}$$

n = 84

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0806074	.1547884	.2230496	.2858582	.3436450	.3968270	.4457108	.4904920
2	.0033011	.0125082	.0266689	.0449430	.0665907	.0909627	.1174903	.1456770
3	.0000897	.0006753	.0021460	.0047904	.0088130	.0143477	.0214703	.0302028
4	.0000018	.0000272	.0001291	.0003628	.0008770	.0017070	.0032968	.0047554
5		.0000009	.0000062	.0000243	.0000695	.0001619	.0003279	.0005988
6			.0000002	.0000013	.0000045	.0000127	.0000300	.0000625
7				.0000001	.0000003	.0000008	.0000023	.0000055
8							.0000002	.0000004
9								

c/p	.009	.010
1	.5320634	.5701110
2	.1750906	.2053567
3	.0405504	.0524546
4	.0071530	.0102392
5	.0010110	.0016043
6	.0001185	.0002087
7	.0000118	.0000231
8	.0000010	.0000023
9	.0000001	.0000002

n = 85

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0815268	.1564788	.2253804	.2887148	.3469268	.4004262	.4495902	.4947665
2	.0033784	.0127928	.0272581	.0459066	.0679759	.0927977	.1197878	.1484371
3	.0000929	.0006990	.0022196	.0049510	.0091019	.0148074	.0224424	.0311320
4	.0000014	.0000285	.0001351	.0004004	.0009167	.0017829	.0033984	.0049591
5		.0000009	.0000065	.0000257	.0000735	.0001712	.0003463	.0006321
6			.0000003	.0000014	.0000049	.0000136	.0000321	.0000668
7				.0000001	.0000003	.0000009	.0000025	.0000060
8						.0000001	.0000002	.0000005
9								

c/p	.009	.010
1	.5362749	.5744099
2	.1783034	.2090042
3	.0417613	.0539336
4	.0074536	.0106214
5	.0010663	.0016906
6	.0001266	.0002327
7	.0000128	.0000250
8	.0000011	.0000024
9	.0000001	.0000002

n = 86

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0824453	.1581658	.2277043	.2913600	.3501922	.4040236	.4534431	.4980084
2	.0034566	.0130802	.0278535	.0468778	.0693707	.0946435	.1220964	.1512077
3	.0000962	.0007232	.0022947	.0051148	.0093963	.0152754	.0228259	.0320704
4	.0000020	.0000298	.0001414	.0004182	.0009576	.0018610	.0032317	.0051684
5		.0000010	.0000069	.0000272	.0000777	.0001809	.0003656	.0006667
6			.0000003	.0000015	.0000052	.0000145	.0000343	.0000713
7				.0000001	.0000003	.0000010	.0000027	.0000065
8						.0000001	.0000002	.0000005
9								

c/p	.009	.010
1	.5404484	.5786658
2	.1815251	.2186583
3	.0429902	.0555338
4	.0077623	.0110946
5	.0011338	.0017803
6	.0001350	.0002373
7	.0000138	.0000269
8	.0000012	.0000027
9	.0000001	.0000002

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 97

p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0011628	.1598495	.2300212	.2943337	.3534412	.4075995	.4572490	.5028179
2	.0015353	.0133704	.0294520	.0476566	.0707748	.0964998	.1244159	.1539868
3	.0000995	.0007479	.0023713	.0052819	.0096961	.0157516	.0233208	.0330235
4	.0000021	.0000112	.0001478	.0004374	.0009998	.0019415	.0033689	.0053837
5		.0000010	.0000073	.0000288	.0000821	.0001910	.0003857	.0007027
6			.0000003	.0000016	.0000056	.0000155	.0000366	.0000761
7				.0000001	.0000003	.0000011	.0000029	.0000070
8						.0000001	.0000002	.0000006
9								

p	.009	.010
1	.5445844	.5828791
2	.1847655	.2163183
3	.0442370	.0571051
4	.0080794	.0115390
5	.0011835	.0018735
6	.0001439	.0002528
7	.0000149	.0000290
8	.0000013	.0000029
9	.0000001	.0000003

n = 98

p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0042794	.1615298	.2323311	.2972161	.3566740	.4111539	.4610681	.5067954
2	.0036154	.0136633	.0290567	.0489427	.0721881	.0983564	.1267458	.1567792
3	.0001030	.0007731	.0024496	.0054522	.0100015	.0162361	.0242271	.0339918
4	.0000022	.0000126	.0001545	.0004568	.0010433	.0020244	.0035100	.0056048
5		.0000011	.0000077	.0000304	.0000867	.0002015	.0004066	.0007402
6			.0000003	.0000017	.0000060	.0000166	.0000390	.0000811
7				.0000001	.0000003	.0000012	.0000032	.0000076
8						.0000001	.0000002	.0000006
9								

p	.009	.010
1	.5480771	.5870503
2	.1879039	.2199840
3	.0455617	.0586972
4	.0084048	.0119947
5	.0012456	.0019701
6	.0001533	.0002690
7	.0000161	.0000313
8	.0000015	.0000032
9	.0000001	.0000003

n = 99

p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0051953	.1632067	.2346341	.3000273	.3598906	.4146869	.4648407	.5107410
2	.0036040	.0139590	.0296265	.0498362	.0736106	.1002431	.1290861	.1595793
3	.0001065	.0007989	.0025294	.0056257	.0103124	.0167287	.0249447	.0349735
4	.0000023	.0000141	.0001614	.0004767	.0010881	.0021097	.0036550	.0058319
5		.0000012	.0000082	.0000321	.0000915	.0002124	.0004283	.0007791
6			.0000003	.0000018	.0000064	.0000177	.0000416	.0000864
7				.0000001	.0000004	.0000013	.0000034	.0000081
8						.0000001	.0000002	.0000007
9								

p	.009	.010
1	.5527450	.5911798
2	.1912401	.2236546
3	.0457841	.0603101
4	.0087387	.0124617
5	.0013100	.0020704
6	.0001631	.0002860
7	.0000173	.0000337
8	.0000016	.0000034
9	.0000001	.0000003

$$P(n, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 90

r/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0861100	.1648803	.2369302	.3028272	.3630912	.4181986	.4685868	.5146851
2	.0037775	.0142575	.0302814	.0508370	.0750420	.1021298	.1314364	.1623886
3	.0001101	.0008252	.0026108	.0058026	.0106209	.0172299	.0256737	.0359704
4	.0000024	.0000156	.0001685	.0004973	.0011342	.0021974	.0038048	.0060650
5		.0000012	.0000066	.0000339	.0000965	.0002238	.0004509	.0008195
6			.0000004	.0000019	.0000068	.0000169	.0000443	.0000919
7				.0000001	.0000004	.0000014	.0000037	.0000088
8						.0000001	.0000003	.0000007
9								.0000001

r/p	.009	.010
1	.5567700	.5952680
2	.1944937	.2273299
3	.0480042	.0610435
4	.0090811	.0129402
5	.0013769	.0021743
6	.0001734	.0003038
7	.0000186	.0000362
8	.0000017	.0000037
9	.0000001	.0000003

n = 91

r/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0870239	.1665506	.2392194	.3056159	.3662757	.4216096	.4723067	.5185378
2	.0038599	.0145580	.0309014	.0518449	.0764822	.1040262	.1337964	.1648067
3	.0001137	.0008521	.0026938	.0059027	.0109510	.0177393	.0264148	.0369817
4	.0000025	.0000172	.0001758	.0005186	.0011817	.0022876	.0039571	.0063042
5		.0000013	.0000091	.0000358	.0001017	.0002356	.0004743	.0008615
6			.0000004	.0000020	.0000072	.0000201	.0000472	.0000977
7				.0000001	.0000004	.0000015	.0000040	.0000094
8						.0000001	.0000003	.0000008
9								.0000001

r/p	.009	.010
1	.5607593	.5993153
2	.1977542	.2310093
3	.0494019	.0635974
4	.0094321	.0134302
5	.0014462	.0022819
6	.0001843	.0003225
7	.0000200	.0000389
8	.0000019	.0000041
9	.0000002	.0000004

n = 92

r/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0879344	.1682175	.2415018	.3083934	.3694443	.4251595	.4760005	.5223695
2	.0039430	.0148628	.0315263	.0528600	.0779312	.1059322	.1361660	.1680334
3	.0001175	.0008795	.0027785	.0061662	.0112787	.0182571	.0271657	.0380073
4	.0000026	.0000389	.0001834	.0005404	.0012305	.0023803	.0041143	.0065497
5		.0000014	.0000096	.0000377	.0001071	.0002479	.0004987	.0009050
6			.0000004	.0000022	.0000077	.0000214	.0000501	.0001038
7				.0000001	.0000005	.0000016	.0000043	.0000101
8						.0000001	.0000003	.0000009
9								.0000001

r/p	.009	.010
1	.5647123	.6033222
2	.2010212	.2346923
3	.0507371	.0652715
4	.0097918	.0139119
5	.0015181	.0023934
6	.0001956	.0003421
7	.0000215	.0000417
8	.0000020	.0000044
9	.0000002	.0000004

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 93

c \ p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0000489	.1698810	.2437773	.3111598	.3725971	.4286085	.4796685	.5262104
2	.0040270	.0151695	.0321563	.0538822	.0793807	.1078475	.1385448	.1706688
3	.0001213	.0009075	.0028647	.0063530	.0116119	.0187831	.0279287	.0390477
4	.0000057	.0000405	.0001911	.0005429	.0012806	.0024755	.0042756	.0068013
5		.0000014	.0000101	.0000397	.0001187	.0002607	.0005240	.0009502
6			.0000004	.0000023	.0000082	.0000228	.0000533	.0001108
7				.0000001	.0000005	.0000017	.0000046	.0000108
8						.0000001	.0000003	.0000009
9								.0000001

c \ p	.009	.010
1	.5686301	.6072890
2	.2042944	.2383786
3	.0520896	.0669657
4	.0101603	.0144453
5	.0015926	.0025088
6	.0002075	.0003626
7	.0000230	.0000447
8	.0000022	.0000048
9	.0000002	.0000005

n = 94

c \ p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0897600	.1715413	.2460459	.3139152	.3757341	.4320369	.4833106	.5300007
2	.0041118	.0154789	.0327911	.0549113	.0809548	.1097721	.1409327	.1737110
3	.0001252	.0009360	.0029526	.0065431	.0119508	.0193178	.0287030	.0401023
4	.0000028	.0000423	.0001992	.0005861	.0013324	.0025734	.0044412	.0070593
5	.0000001	.0000015	.0000107	.0000418	.0001185	.0002740	.0005503	.0009970
6			.0000005	.0000025	.0000087	.0000242	.0000566	.0001170
7				.0000001	.0000005	.0000018	.0000050	.0000117
8						.0000001	.0000004	.0000010
9								.0000001

c \ p	.009	.010
1	.5725124	.6112161
2	.2075734	.2420677
3	.0534595	.0686798
4	.0105177	.0149705
5	.0016697	.0026282
6	.0002300	.0003841
7	.0000247	.0000479
8	.0000024	.0000052
9	.0000002	.0000005

n = 95

c \ p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0906703	.1731982	.2483078	.3166595	.3788555	.4354447	.4869277	.5337607
2	.0041975	.0157210	.0334309	.0559473	.0832292	.1117057	.1433294	.1785613
3	.0001299	.0009451	.0029421	.0067365	.0122953	.0198803	.0294884	.0411718
4	.0000030	.0000440	.0002074	.0006099	.0013855	.0026738	.0046111	.0073236
5	.0000001	.0000016	.0000112	.0000440	.0001246	.0002878	.0005775	.0010455
6			.0000005	.0000026	.0000093	.0000257	.0000609	.0001240
7				.0000001	.0000006	.0000019	.0000053	.0000125
8						.0000001	.0000004	.0000011
9								.0000001

c \ p	.009	.010
1	.5763598	.6151039
2	.2108570	.2457592
3	.0548465	.0704137
4	.0109240	.0155076
5	.0017495	.0027316
6	.0002330	.0004066
7	.0000245	.0000512
8	.0000026	.0000056
9	.0000002	.0000005

AMCP 706-109

$$P(x, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 96

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0915794	.1748618	.2505629	.3193929	.3819612	.4388320	.4905198	.5374906
2	.0042040	.0161058	.0340765	.0569901	.0837118	.1136291	.1457345	.1794189
3	.0001333	.0009948	.0031333	.0069334	.0126455	.0204113	.0302858	.0423343
4	.0000031	.0000459	.0002159	.0006344	.0014401	.0027770	.0047852	.0075944
5	.0000001	.0000017	.0000118	.0000463	.0001309	.0003031	.0006050	.0010937
6		.0000001	.0000005	.0000028	.0000099	.0000273	.0000637	.0001314
7				.0000001	.0000006	.0000021	.0000057	.0000134
8						.0000001	.0000004	.0000018
9								.0000001
10								

c/p	.009	.010
1	.5801726	.6189529
2	.2141474	.2494526
3	.0562506	.0721672
4	.0113193	.0160566
5	.0018320	.0028791
6	.0002467	.0004300
7	.0000283	.0000548
8	.0000028	.0000061
9	.0000002	.0000006
10		.0000001

n = 97

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0924880	.1765021	.2528112	.321553	.3850514	.4421990	.4940655	.5411907
2	.0043713	.0164233	.0347250	.0580127	.0853626	.1155992	.1481480	.1822835
3	.0001374	.0010250	.0032261	.0071335	.0130013	.0209707	.0310937	.0433816
4	.0000032	.0000478	.0002247	.0006596	.0014961	.0028828	.0049637	.0078717
5	.0000001	.0000018	.0000124	.0000486	.0001375	.0003170	.0006359	.0011477
6		.0000001	.0000006	.0000030	.0000105	.0000289	.0000674	.0001391
7				.0000002	.0000007	.0000022	.0000061	.0000144
8						.0000002	.0000005	.0000013
9								.0000001
10								

c/p	.009	.010
1	.5839510	.6227634
2	.2174416	.2531476
3	.0576712	.0739400
4	.0117237	.0166177
5	.0019174	.0030109
6	.0002610	.0004545
7	.0000303	.0000585
8	.0000031	.0000066
9	.0000003	.0000006
10		.0000001

n = 98

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0933954	.1781491	.2550528	.3248258	.3881261	.4455453	.4976269	.5448618
2	.0044504	.0167435	.0353793	.0590960	.0869013	.1175580	.1556696	.1851547
3	.0001417	.0010558	.0033206	.0073372	.0133628	.0215385	.0319130	.0444631
4	.0000034	.0000497	.0002337	.0006885	.0015431	.0028913	.0049466	.0078555
5	.0000001	.0000019	.0000131	.0000510	.0001442	.0003324	.0006653	.0011915
6		.0000001	.0000006	.0000031	.0000111	.0000306	.0000714	.0001478
7				.0000002	.0000007	.0000024	.0000065	.0000184
8						.0000002	.0000005	.0000014
9								.0000001
10								

c/p	.009	.010
1	.5876954	.6265357
2	.2207402	.2568438
3	.0591096	.0757321
4	.0121372	.0171910
5	.0020057	.0031470
6	.0002750	.0004801
7	.0000324	.0000625
8	.0000033	.0000071
9	.0000003	.0000007
10		.0000001

$$P(e, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 94

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0943022	.1797928	.2572874	.3275275	.3911855	.4488723	.5011435	.5485023
2	.0045483	.0170663	.0360383	.0601590	.0883079	.1195267	.1529990	.1880324
3	.0001460	.0010871	.0034168	.0075443	.0137300	.0221146	.0327436	.0455886
4	.0000035	.0000518	.0002429	.0007121	.0016127	.0031026	.0053340	.0084460
5	.0000001	.0000020	.0000137	.0000536	.0001513	.0003483	.0006967	.0012571
6		.0000001	.0000006	.0000013	.0000018	.0000034	.0000076	.0001354
7				.0000002	.0000008	.0000026	.0000070	.0000164
8						.0000003	.0000006	.0000015
9								.0000001
10								

c/p	.009	.010
1	.5914062	.6302704
2	.2240488	.2605407
3	.0605643	.0775432
4	.0125600	.0177764
5	.0020969	.0032874
6	.0002914	.0005067
7	.0000346	.0000667
8	.0000036	.0000076
9	.0000003	.0000008
10		.0000001

n = 100

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0953077	.1814332	.2595187	.3302174	.3942296	.4521793	.5046355	.5521143
2	.0046381	.0173910	.0367020	.0612284	.0898283	.1215028	.1554360	.1909161
3	.0001304	.0011191	.0035146	.0077547	.0141029	.0226991	.0335854	.0467281
4	.0000036	.0000538	.0002525	.0007394	.0016733	.0032167	.0053858	.0084431
5	.0000001	.0000021	.0000144	.0000582	.0001586	.0003649	.0007291	.0013146
6		.0000001	.0000007	.0000015	.0000025	.0000034	.0000079	.0001644
7				.0000002	.0000008	.0000028	.0000075	.0000175
8						.0000002	.0000006	.0000016
9								.0000001
10								

c/p	.009	.010
1	.5950835	.6336777
2	.2273491	.2642360
3	.0620386	.0793732
4	.0129920	.0183740
5	.0021910	.0034323
6	.0003077	.0005348
7	.0000369	.0000711
8	.0000038	.0000082
9	.0000004	.0000008
10		.0000001

n = 101

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0961126	.1830703	.2617372	.3328946	.3972584	.4554662	.5081031	.5556974
2	.0047286	.0177198	.0373705	.0623044	.0913443	.1234869	.1578804	.1938057
3	.0001349	.0011516	.0036142	.0079686	.0144815	.0232219	.0344384	.0478816
4	.0000038	.0000560	.0002623	.0007673	.0017354	.0033338	.0053783	.0080470
5	.0000001	.0000022	.0000151	.0000590	.0001468	.0003220	.0006727	.0013740
6		.0000001	.0000007	.0000018	.0000032	.0000036	.0000045	.0001736
7				.0000002	.0000009	.0000023	.0000060	.0000187
8					.0000001	.0000003	.0000007	.0000018
9								.0000001
10								

c/p	.009	.010
1	.5987278	.6376880
2	.2306587	.2679353
3	.0635234	.0812219
4	.0134334	.0189840
5	.0022882	.0035817
6	.0003246	.0005635
7	.0000393	.0000757
8	.0000041	.0000088
9	.0000004	.0000009
10		.0000001

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 102

λ/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0970165	.1847042	.2639520	.3355650	.4002721	.4587334	.5115464	.5592818
2	.0048200	.0180505	.0380436	.0633868	.0928739	.1254768	.1603328	.1967008
3	.0001594	.0011848	.0037155	.0081840	.0148658	.0238931	.0353025	.0490490
4	.0000039	.0000581	.0002723	.0007943	.0017991	.0031833	.0050233	.0073377
5	.0000001	.0000023	.0000159	.0000618	.0001740	.0003997	.0007974	.0014354
6		.0000001	.0000008	.0000040	.0000140	.0000384	.0000892	.0001838
7				.0000002	.0000010	.0000031	.0000085	.0000199
8					.0000001	.0000003	.0000007	.0000019
9						.0000001	.0000001	.0000002
10								

λ/p	.009	.010
1	.6023392	.6412517
2	.2339713	.2716322
3	.0650274	.0830890
4	.0138842	.0196064
5	.0023886	.0037354
6	.0003423	.0005937
7	.0000410	.0000806
8	.0000045	.0000095
9	.0000004	.0000010
10		.0000001

n = 103

λ/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0979195	.1863348	.2661601	.3382227	.4032708	.4619810	.5149655	.5627778
2	.0048182	.0181838	.0381213	.0644755	.0944109	.1274783	.1637905	.1996018
3	.0001641	.0012185	.0038184	.0084088	.0152559	.0243086	.0361777	.0503303
4	.0000041	.0000504	.0002826	.0008259	.0018645	.0033759	.0061289	.0096782
5	.0000001	.0000024	.0000167	.0000647	.0001821	.0004180	.0008333	.0014988
6		.0000001	.0000008	.0000042	.0000148	.0000406	.0000942	.0001932
7				.0000002	.0000010	.0000034	.0000091	.0000212
8					.0000001	.0000003	.0000008	.0000020
9						.0000001	.0000001	.0000002
10								

λ/p	.009	.010
1	.6059182	.6448392
2	.2372866	.2753284
3	.0665461	.0849744
4	.0143445	.0202412
5	.0024920	.0038945
6	.0003607	.0006351
7	.0000446	.0000837
8	.0000048	.0000108
9	.0000005	.0000011
10		.0000001

n = 104

λ/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0980212	.1879621	.2683616	.3408698	.4062544	.4652091	.5183608	.5662756
2	.0050052	.0187197	.0394036	.0655705	.0959552	.1294883	.1652557	.1996067
3	.0001658	.0012522	.0038231	.0084310	.0155516	.0246180	.0367040	.0508188
4	.0000043	.0000587	.0002832	.0008268	.0018714	.0033701	.0061399	.0096997
5	.0000001	.0000025	.0000175	.0000678	.0001908	.0004369	.0008704	.0015448
6		.0000001	.0000009	.0000044	.0000155	.0000428	.0000994	.0002037
7				.0000002	.0000011	.0000036	.0000097	.0000224
8					.0000001	.0000003	.0000008	.0000020
9						.0000001	.0000001	.0000002
10								

λ/p	.009	.010
1	.6094649	.6483908
2	.2408043	.2790235
3	.0680848	.0863780
4	.0148143	.0208886
5	.0025387	.0040579
6	.0003799	.0006578
7	.0000474	.0000911
8	.0000051	.0000110
9	.0000005	.0000012
10		.0000001

AMCP 706-109

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 105

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.0007228	.1895868	.2705566	.3435043	.4092231	.4684179	.5217323	.5697453
2	.0050990	.0190582	.0400905	.0666717	.0975867	.1314996	.1677274	.2054168
3	.0001737	.0012876	.0040296	.0088588	.0160518	.0257466	.0379613	.0523359
4	.0000044	.0000651	.0003041	.0008873	.0020000	.0038300	.0066513	.0105112
5	.0000001	.0000026	.0000183	.0000709	.0001993	.0004565	.0009087	.0016317
6		.0000001	.0000009	.0000047	.0000165	.0000452	.0001047	.0002146
7				.0000003	.0000012	.0000038	.0000103	.0000243
8					.0000001	.0000003	.0000009	.0000023
9						.0000001	.0000001	.0000002
10							.0000001	.0000000

c/p	.009	.010
1	.4139797	.4519069
2	.2439241	.2882717
3	.0696374	.0887994
4	.0152938	.0215485
5	.0027084	.0042362
6	.0003999	.0006918
7	.0000504	.0000968
8	.0000055	.0000118
9	.0000005	.0000013
10		.0000001

n = 10

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1006231	.1912070	.2727449	.3461323	.4121770	.4716074	.5250801	.5731874
2	.0081937	.0193993	.0407819	.0677790	.0996653	.1355212	.1748035	.2154114
3	.0001784	.0011473	.0041378	.0090901	.0164604	.0263211	.0388497	.0533861
4	.0000044	.0000673	.0003153	.0008192	.0020703	.0039615	.0064748	.0100095
5	.0000001	.0000027	.0000191	.0000742	.0002053	.0004768	.0009482	.0016713
6		.0000001	.0000010	.0000050	.0000174	.0000477	.0001104	.0002359
7				.0000003	.0000012	.0000041	.0000110	.0000256
8					.0000001	.0000003	.0000009	.0000023
9						.0000001	.0000001	.0000002
10							.0000001	.0000000

c/p	.009	.010
1	.4164689	.4553970
2	.2472456	.2884091
3	.0712040	.0907386
4	.0157829	.0222210
5	.0028219	.0043993
6	.0004207	.0007272
7	.0000534	.0001027
8	.0000059	.0000126
9	.0000006	.0000014
10	.0000001	.0000001

n = 109

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1015284	.1928246	.2749267	.3487478	.4151181	.4747777	.5284046	.5764019
2	.0052891	.0197429	.0414778	.0688924	.1006308	.1355497	.1738996	.2154203
3	.0001836	.0011898	.0042477	.0093248	.0168735	.0270240	.0397388	.0545015
4	.0000044	.0000701	.0003248	.0008519	.0021483	.0040360	.0064989	.0101050
5	.0000001	.0000029	.0000300	.0000776	.0002176	.0004977	.0009490	.0016730
6		.0000001	.0000010	.0000052	.0000183	.0000503	.0001168	.0002377
7				.0000003	.0000013	.0000043	.0000117	.0000278
8					.0000001	.0000003	.0000010	.0000027
9						.0000001	.0000001	.0000002
10							.0000001	.0000000

c/p	.009	.010
1	.4199147	.4588139
2	.2505685	.2900989
3	.0727904	.0928153
4	.0168817	.0239461
5	.0029385	.0045777
6	.0004423	.0007619
7	.0000569	.0001090
8	.0000064	.0000135
9	.0000006	.0000015
10	.0000001	.0000001

$$P(r, n, r) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 102

$\frac{r}{n}$	.001	.002	.003	.004	.005	.006	.007	.008
1	.1024200	.1944390	.2771019	.3513528	.4189406	.4779891	.5317057	.5799891
2	.00531853	.0200821	.0421791	.0700118	.1088033	.1375850	.1731774	.2141731
3	.0001807	.0013962	.0043594	.0095631	.0173928	.0276781	.0407193	.0563418
4	.0000040	.0000786	.0003385	.0009853	.0023159	.0042336	.0072864	.0112676
5	.0000001	.0000030	.0000210	.0000811	.0002272	.0005193	.0010310	.0018470
6		.0000001	.0000011	.0000055	.0000193	.0000529	.0001223	.0002300
7				.0000003	.0000014	.0000046	.0000124	.0000289
8					.0000001	.0000003	.0000011	.0000029
9							.0000001	.0000003
10								.0000003

$\frac{r}{n}$	.009	.010
1	.6233155	.6622456
2	.8518086	.8937863
3	.0743904	.0946693
4	.0167902	.0236040
5	.0030586	.0047210
6	.0004647	.0008080
7	.0000303	.0001135
8	.0000048	.0000145
9	.0000007	.0000016
10	.0000001	.0000002

n = 109

$\frac{r}{n}$	.001	.002	.003	.004	.005	.006	.007	.008
1	.1013185	.1960501	.2792706	.3539474	.4209504	.4810413	.5349938	.5833498
2	.0054824	.0204378	.0428829	.0711378	.1037885	.1396871	.1776753	.2170996
3	.0001939	.0014336	.0044708	.0098049	.0177140	.0283346	.0416405	.0574039
4	.0000051	.0000753	.0003506	.0010197	.0022913	.0043743	.0074628	.0117874
5	.0000001	.0000031	.0000219	.0000847	.0002371	.0005416	.0010744	.0018331
6		.0000001	.0000011	.0000058	.0000204	.0000587	.0001287	.0002428
7				.0000003	.0000015	.0000047	.0000132	.0000307
8					.0000001	.0000004	.0000011	.0000031
9							.0000001	.0000003
10								.0000003

$\frac{r}{n}$	.009	.010
1	.6267555	.6456231
2	.8578174	.8974708
3	.0760054	.0946608
4	.0173006	.0243147
5	.0031832	.0049424
6	.0004881	.0008416
7	.0000640	.0001224
8	.0000073	.0000153
9	.0000007	.0000017
10	.0000001	.0000002

n = 110

$\frac{r}{n}$	.001	.002	.003	.004	.005	.006	.007	.008
1	.1042152	.1974580	.2814388	.3565316	.4238456	.4841751	.5382389	.5866884
2	.0055802	.0207890	.0435920	.0723684	.1051683	.1416787	.1801764	.2200396
3	.0001948	.0014716	.0045881	.0100509	.0181471	.0289028	.0426127	.0596798
4	.0000053	.0000760	.0003630	.0010348	.0023284	.0045180	.0077022	.0118944
5	.0000001	.0000033	.0000229	.0000884	.0002474	.0005645	.0011191	.0018006
6		.0000001	.0000012	.0000061	.0000215	.0000586	.0001353	.0002740
7			.0000001	.0000004	.0000016	.0000052	.0000140	.0000328
8					.0000001	.0000004	.0000013	.0000033
9							.0000001	.0000003
10								.0000003

$\frac{r}{n}$	.009	.010
1	.6300850	.64699469
2	.8605438	.8911524
3	.0776368	.0946686
4	.0178349	.0250381
5	.0033094	.0051430
6	.0005123	.0008827
7	.0000678	.0001296
8	.0000078	.0000166
9	.0000008	.0000019
10	.0000001	.0000002

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 111

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1051110	.1992627	.2835885	.3591055	.4267264	.4872791	.5414712	.5899889
2	.0056788	.0211427	.0443056	.0734055	.1069607	.1437307	.1826829	.2229628
3	.0002046	.0015103	.0047051	.0102391	.0185832	.0296784	.0435756	.0601690
4	.0000055	.0000808	.0003757	.0010908	.0024473	.0046649	.0079466	.0124697
5	.0000001	.0000034	.0000239	.0000923	.0002580	.0005881	.0011652	.0020923
6		.0000001	.0000013	.0000065	.0000236	.0000617	.0001422	.0002898
7			.0000001	.0000004	.0000017	.0000055	.0000148	.0000345
8					.0000001	.0000004	.0000013	.0000036
9							.0000001	.0000003
10								

c/p	.009	.010
1	.6334142	.6722772
2	.2638691	.3048305
3	.0792829	.1006934
4	.0183751	.0257745
5	.0034401	.0053420
6	.0005375	.0009253
7	.0000718	.0001371
8	.0000083	.0000177
9	.0000004	.0000020
10	.0000001	.0000002

n = 112

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1060058	.2008641	.2857377	.3616690	.4295927	.4903465	.5446809	.5932690
2	.0057783	.0214990	.0450234	.0745483	.1085595	.1457919	.1851944	.2258991
3	.0002101	.0015495	.0048239	.0105515	.0190251	.0303627	.0445493	.0614714
4	.0000057	.0000836	.0003886	.0011276	.0025280	.0046150	.0078196	.0128503
5	.0000001	.0000036	.0000250	.0000963	.0002690	.0006127	.0012127	.0021654
6		.0000001	.0000013	.0000068	.0000238	.0000648	.0001494	.0003042
7			.0000001	.0000004	.0000018	.0000058	.0000157	.0000365
8					.0000001	.0000005	.0000014	.0000038
9							.0000001	.0000004
10								

c/p	.009	.010
1	.6367135	.6755545
2	.2671950	.3085050
3	.0809442	.1027348
4	.0189233	.0265236
5	.0035745	.0055463
6	.0005636	.0009695
7	.0000760	.0001450
8	.0000089	.0000189
9	.0000009	.0000022
10	.0000001	.0000002

n = 113

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1068998	.2024624	.2878805	.3642224	.4324448	.4934044	.5478688	.5965828
2	.0058785	.0218577	.0457456	.0756968	.1101647	.1478593	.1877108	.2288380
3	.0002154	.0015894	.0049445	.0108075	.0194728	.0310553	.0455339	.0627868
4	.0000059	.0000866	.0004019	.0011653	.0026105	.0049683	.0084505	.0132393
5	.0000001	.0000038	.0000261	.0001004	.0002803	.0006379	.0012616	.0022509
6		.0000001	.0000014	.0000078	.0000250	.0000681	.0001568	.0003191
7			.0000001	.0000004	.0000019	.0000062	.0000166	.0000386
8					.0000001	.0000005	.0000015	.0000041
9							.0000001	.0000004
10								

c/p	.009	.010
1	.6399830	.6787989
2	.2705205	.3121755
3	.0826275	.1047925
4	.0194815	.0272858
5	.0037127	.0057561
6	.0005907	.0010152
7	.0000804	.0001532
8	.0000065	.0000202
9	.0000010	.0000023
10	.0000001	.0000002

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 114

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1077929	.2040575	.2000168	.3667655	.4352826	.4964439	.5510331	.5997507
2	.0059795	.0222189	.0464720	.0768509	.1117761	.1499325	.1902319	.2317795
3	.0002213	.0016100	.0050669	.0110670	.0194262	.0317561	.0465291	.0641152
4	.0000061	.0000896	.0004154	.0012039	.0025948	.0051248	.0087100	.0136356
5	.0000001	.0000039	.0000272	.0001047	.0002919	.0006639	.0013119	.0023388
6		.0000001	.0000015	.0000075	.0000263	.0000715	.0001644	.0003345
7			.0000001	.0000005	.0000020	.0000066	.0000176	.0000409
8					.0000001	.0000005	.0000016	.0000043
9							.0000001	.0000004
10								

c/p	.009	.010
1	.6412232	.6420109
2	.2718458	.3158417
3	.0843116	.1068663
4	.0263497	.0280608
5	.0070544	.0059714
6	.0006188	.0010624
7	.0000850	.0001619
8	.0000102	.0000215
9	.0000011	.0000025
10	.0000001	.0000003

n = 115

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1086851	.2056494	.2921468	.3692984	.4381061	.4994653	.5541759	.6029527
2	.0060813	.0225826	.0472020	.0780105	.1133936	.1520116	.1927575	.2347233
3	.0002271	.0016711	.0051911	.0113302	.0203855	.0324652	.0475350	.0654568
4	.0000063	.0000927	.0004295	.0012433	.0027809	.0052846	.0089748	.0140395
5	.0000001	.0000041	.0000283	.0001091	.0003039	.0006907	.0013637	.0024892
6		.0000001	.0000016	.0000079	.0000276	.0000751	.0001726	.0003506
7			.0000001	.0000005	.0000021	.0000070	.0000187	.0000438
8					.0000001	.0000006	.0000016	.0000046
9							.0000001	.0000004
10								

c/p	.009	.010
1	.6464342	.6851908
2	.2771702	.3195034
3	.0860174	.1084561
4	.0266201	.0288489
5	.0040003	.0061923
6	.0006479	.0011117
7	.0000898	.0001709
8	.0000108	.0000229
9	.0000012	.0000027
10	.0000001	.0000003

n = 116

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1095765	.2072181	.2942703	.3718212	.4409156	.5024685	.5572966	.6061890
2	.0061830	.0229487	.0479374	.0791757	.1150178	.1540963	.1952874	.2376691
3	.0002320	.0017110	.0053171	.0115969	.0208505	.0331824	.0485516	.0668107
4	.0000065	.0000958	.0004438	.0012837	.0028690	.0054477	.0092447	.0144808
5	.0000001	.0000043	.0000296	.0001136	.0003163	.0007183	.0014170	.0025291
6		.0000002	.0000016	.0000083	.0000290	.0000788	.0001809	.0003678
7			.0000001	.0000005	.0000023	.0000074	.0000197	.0000457
8					.0000002	.0000006	.0000019	.0000050
9							.0000002	.0000005
10								

c/p	.009	.010
1	.6496163	.6883389
2	.2804936	.3231603
3	.0877378	.1110616
4	.0212166	.0236499
5	.0041500	.0064189
6	.0006731	.0011685
7	.0000948	.0001803
8	.0000118	.0000244
9	.0000013	.0000029
10	.0000001	.0000003

$$P(c,n,p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

r = 117

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1104669	.2088236	.2963875	.3743339	.4437110	.5054537	.5603956	.6092800
2	.0062073	.0231173	.0486764	.0803463	.1166467	.1561866	.1978215	.2406168
3	.0002364	.0017554	.0054450	.0118672	.0213214	.0330079	.0495787	.0681775
4	.0000068	.0000591	.0004584	.0013249	.0029589	.0056141	.0095128	.0148697
5	.0000002	.0000045	.0000308	.0001183	.0003291	.0007466	.0014718	.0026175
6		.0000003	.0000017	.0000088	.0000304	.0000826	.0001856	.0003844
7			.0000001	.0000006	.0000024	.0000078	.0000209	.0000483
8					.0000002	.0000006	.0000020	.0000053
9							.0000002	.0000008
10								

c/p	.009	.010
1	.6527697	.6914555
2	.2838157	.3268121
3	.0894726	.1131826
4	.0218153	.0304641
5	.0043636	.0066512
6	.0007094	.0012151
7	.0001000	.0001901
8	.0000123	.0000259
9	.0000013	.0000031
10	.0000001	.0000003

n = 110

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1113564	.2104059	.2984984	.3768366	.4464925	.5084210	.5634728	.6124058
2	.0063918	.0233883	.0494196	.0815222	.1182820	.1582822	.2003595	.2435661
3	.0002449	.0017985	.0055747	.0121411	.0217980	.0346416	.0506164	.0695570
4	.0000070	.0001024	.0004734	.0013671	.0030507	.0057336	.0098003	.0152968
5	.0000002	.0000046	.0000321	.0001231	.0003422	.0007758	.0015281	.0027155
6		.0000002	.0000018	.0000092	.0000319	.0000866	.0001986	.0004023
7			.0000001	.0000006	.0000025	.0000083	.0000220	.0000510
8					.0000002	.0000007	.0000021	.0000056
9						.0000001	.0000002	.0000005
10								

c/p	.009	.010
1	.6558048	.6945410
2	.2871363	.3304585
3	.0912217	.1153189
4	.0224242	.0312912
5	.0044612	.0068893
6	.0007417	.0012694
7	.0001055	.0002004
8	.0000131	.0000276
9	.0000014	.0000034
10	.0000001	.0000004

n = 119

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1122451	.2119851	.3006029	.3793293	.4492600	.5113704	.5665285	.6155065
2	.0064965	.0240617	.0501668	.0827035	.1199230	.1603830	.2089013	.2445168
3	.0002511	.0018423	.0057082	.0124187	.0222804	.0353834	.0516646	.0709491
4	.0000078	.0001058	.0004887	.0014102	.0031444	.0059570	.0100860	.0157308
5	.0000002	.0000048	.0000334	.0001281	.0003558	.0008059	.0015860	.0028168
6		.0000002	.0000019	.0000097	.0000335	.0000907	.0002078	.0004208
7			.0000001	.0000006	.0000027	.0000087	.0000233	.0000538
8					.0000002	.0000007	.0000023	.0000060
9						.0000001	.0000002	.0000006
10								.0000001

c/p	.009	.010
1	.6584918	.6978936
2	.2904551	.3340993
3	.0929849	.1174703
4	.0230434	.0321315
5	.0046289	.0071333
6	.0007752	.0013256
7	.0001112	.0002110
8	.0000139	.0000293
9	.0000016	.0000036
10	.0000002	.0000004

$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 120

c \ p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1151328	.2135612	.3027011	.3818119	.4520137	.5143022	.5695628	.6185885
2	.0066022	.0244376	.0509181	.0838900	.1215697	.1624889	.2054467	.2494687
3	.0002573	.0018868	.0058396	.0126998	.0227686	.0361334	.0527833	.0723839
4	.0000075	.0001092	.0005043	.0014542	.0032401	.0061336	.0103770	.0161720
5	.0000002	.0000050	.0000348	.0001332	.0003697	.0008368	.0016455	.0029192
6		.0000002	.0000020	.0000101	.0000351	.0000950	.0002175	.0004400
7			.0000001	.0000007	.0000028	.0000092	.0000246	.0000567
8					.0000002	.0000008	.0000024	.0000064
9						.0000001	.0000002	.0000006
10							.0000000	.0000001

c \ p	.009	.010
1	.6620604	.7006196
2	.2917719	.3377343
3	.0947621	.1196365
4	.0216728	.0329849
5	.0047886	.0073833
6	.0008098	.0013837
7	.0001172	.0002222
8	.0000148	.0000311
9	.0000016	.0000039
10	.0000002	.0000004

n = 121

c \ p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1140197	.2151340	.3047930	.3842847	.4547536	.5172164	.5725758	.6216338
2	.0067087	.0248158	.0516735	.0850817	.1232219	.1645998	.2079955	.2524216
3	.0002636	.0019319	.0059749	.0129846	.0232686	.0368916	.0537924	.0737706
4	.0000077	.0001128	.0005204	.0014992	.0033377	.0063136	.0106734	.0166214
5	.0000002	.0000052	.0000362	.0001385	.0003841	.0008686	.0017466	.0030255
6		.0000002	.0000021	.0000106	.0000367	.0000995	.0002375	.0004598
7			.0000001	.0000007	.0000030	.0000097	.0000259	.0000598
8					.0000002	.0000008	.0000026	.0000068
9						.0000001	.0000002	.0000007
10							.0000000	.0000001

c \ p	.009	.010
1	.6651023	.7036134
2	.2970865	.3413631
3	.0965532	.1218175
4	.0241127	.0338514
5	.0049566	.0076393
6	.0008456	.0014437
7	.0001235	.0002333
8	.0000157	.0000330
9	.0000018	.0000041
10	.0000003	.0000005

n = 122

c \ p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1149057	.2167038	.3068786	.3867476	.4574799	.5201131	.5755678	.6246607
2	.0068161	.0251965	.0524328	.0862785	.1248796	.1667155	.2105476	.2553753
3	.0002701	.0019777	.0061119	.0132730	.0237624	.0376578	.0548718	.0751998
4	.0000080	.0001164	.0005367	.0015452	.0034374	.0064970	.0109753	.0170786
5	.0000002	.0000055	.0000376	.0001439	.0003988	.0009012	.0017694	.0031343
6		.0000002	.0000022	.0000111	.0000385	.0001041	.0002379	.0004803
7			.0000001	.0000007	.0000032	.0000101	.0000273	.0000530
8					.0000002	.0000009	.0000027	.0000072
9						.0000001	.0000002	.0000007
10							.0000000	.0000001
11								.0000000

c \ p	.009	.010
1	.6651023	.7065773
2	.2970865	.3449856
3	.0965532	.1240130
4	.0241127	.0347311
5	.0049566	.0079014
6	.0008456	.0015057
7	.0001300	.0002459
8	.0000167	.0000350
9	.0000019	.0000044
10	.0000003	.0000005
11		.0000001

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 123

$c \backslash p$	.001	.002	.003	.004	.005	.006	.007	.008
1	.1157908	.2182704	.3059580	.3892006	.4601925	.5229924	.5785388	.6276634
2	.0069242	.0255793	.0531962	.0874804	.1265426	.1688359	.2131027	.2583296
3	.0002766	.0020241	.0062509	.0135650	.0242680	.0384322	.0559615	.0766413
4	.0000083	.0001201	.0005534	.0015921	.0035390	.0066840	.0112826	.0175436
5	.0000002	.0000057	.0000391	.0001495	.0004140	.0009348	.0018338	.0032458
6		.0000002	.0000023	.0000117	.0000403	.0001089	.0002486	.0005016
7			.0000001	.0000008	.0000033	.0000108	.0000288	.0000663
8					.0000002	.0000009	.0000029	.0000076
9						.0000001	.0000003	.0000008
10							.0000003	.0000001
11								.0000001

$c \backslash p$	.009	.010
1	.6711033	.7095115
2	.3037081	.3486016
3	.1001764	.1262227
4	.0256234	.0356239
5	.0053113	.0081607
6	.0009209	.0015696
7	.0001367	.0002585
8	.0000177	.0000371
9	.0000080	.0000047
10	.0000002	.0000005
11		.0000001

n = 124

$c \backslash p$	.001	.002	.003	.004	.005	.006	.007	.008
1	.1166750	.2198338	.3110311	.3916438	.4628915	.5250545	.5814891	.6306421
2	.0070330	.0259649	.0539634	.0886872	.1282109	.1709608	.2156608	.2612843
3	.0002833	.0020712	.0063917	.0138606	.0247794	.0392146	.0570615	.0780947
4	.0000085	.0001240	.0005705	.0016400	.0036426	.0068745	.0113953	.0180164
5	.0000002	.0000059	.0000407	.0001553	.0004296	.0009693	.0018000	.0033602
6		.0000002	.0000024	.0000122	.0000421	.0001138	.0002597	.0005335
7			.0000001	.0000008	.0000035	.0000114	.0000303	.0000698
8					.0000003	.0000010	.0000031	.0000081
9						.0000001	.0000003	.0000008
10							.0000003	.0000001
11								.0000001

$c \backslash p$	.009	.010
1	.6740634	.7124164
2	.3070147	.3522107
3	.1020082	.1284465
4	.0262943	.0365299
5	.0054941	.0084443
6	.0009604	.0016352
7	.0001438	.0002712
8	.0000188	.0000394
9	.0000082	.0000050
10	.0000002	.0000006
11		.0000001

n = 125

$c \backslash p$	.001	.002	.003	.004	.005	.006	.007	.008
1	.1175583	.2213942	.3130980	.3940778	.4655771	.5286993	.5844186	.6335970
2	.0071487	.0263536	.0547346	.0898991	.1298843	.1730902	.2183216	.2648391
3	.0002900	.0021190	.0065345	.0141599	.0252963	.0400051	.0581717	.0795608
4	.0000088	.0001278	.0005870	.0016888	.0037483	.0067683	.0119136	.0184970
5	.0000002	.0000061	.0000423	.0001613	.0004457	.0009047	.0016678	.0034774
6		.0000002	.0000025	.0000128	.0000441	.0001190	.0002718	.0005462
7			.0000001	.0000009	.0000037	.0000120	.0000319	.0000734
8				.0000001	.0000003	.0000011	.0000033	.0000084
9					.0000001	.0000003	.0000003	.0000009
10						.0000001	.0000003	.0000001
11							.0000003	.0000001

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$$F(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

$c \backslash p$.009	.010
1	.6769968	.7152922
2	.3103181	.3558127
3	.1018532	.1306841
4	.0269758	.0374491
5	.0056813	.0087251
6	.0010012	.0017037
7	.0001511	.0002853
8	.0000199	.0000417
9	.0000023	.0000054
10	.0000002	.0000006
11		.0000001

								n = 125
$c \backslash p$	.001	.002	.003	.004	.005	.006	.007	.008
1	.1184407	.2229514	.3151587	.3965009	.4682492	.5315271	.5873277	.6365282
2	.0072521	.0267427	.0550997	.0911158	.1315627	.1752238	.2207849	.2671940
3	.0002863	.0021675	.0062791	.0144629	.0328195	.0408036	.0592920	.0810376
4	.0000091	.0001318	.0006058	.0017357	.0038561	.0072661	.0123374	.0189855
5	.0000002	.0000064	.0000439	.0001674	.0004622	.0010411	.0020375	.0035975
6		.0000003	.0000026	.0000134	.0000461	.0001243	.0002830	.0005695
7			.0000001	.0000009	.0000039	.0000127	.0000336	.0000772
8				.0000001	.0000003	.0000011	.0000035	.0000091
9						.0000001	.0000003	.0000010
10								.0000001
11								

$c \backslash p$	.009	.010
1	.6799038	.7161393
2	.3136182	.3594075
3	.1057114	.1329354
4	.0276677	.0381814
5	.0058729	.0090124
6	.0010433	.0017739
7	.0001588	.0002994
8	.0000211	.0000441
9	.0000025	.0000058
10	.0000003	.0000007
11		.0000001

								n = 127
$c \backslash p$	.001	.002	.003	.004	.005	.006	.007	.008
1	.1193223	.2245055	.3172132	.3989149	.4709073	.5343380	.5902164	.6394360
2	.0073643	.0271351	.0562887	.0923373	.1332452	.1773617	.2233307	.2701497
3	.0003038	.0022166	.0068256	.0147695	.0323482	.0416101	.0604225	.0825289
4	.0000094	.0001359	.0006241	.0017896	.0039889	.0074474	.0125668	.0194819
5	.0000002	.0000066	.0000456	.0001736	.0004702	.0010785	.0021049	.0037207
6		.0000003	.0000028	.0000140	.0000462	.0001298	.0002953	.0005939
7			.0000001	.0000010	.0000041	.0000133	.0000354	.0000811
8				.0000001	.0000003	.0000012	.0000037	.0000097
9						.0000001	.0000003	.0000010
10								.0000001
11								

$c \backslash p$	.009	.010
1	.6827847	.7209379
2	.3169148	.3629948
3	.1075886	.1352001
4	.0283701	.0393270
5	.0060691	.0093061
6	.0010868	.0018463
7	.0001667	.0003142
8	.0000283	.0000467
9	.0000026	.0000061
10	.0000003	.0000007
11		.0000001

$$P(r, n, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

n = 128

r/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1280030	.2260365	.3198616	.4013198	.4735534	.5371320	.5930849	.6413805
2	.0074762	.0275298	.0570715	.0935436	.1349345	.1794035	.2259188	.2731030
3	.0003109	.0022664	.0069739	.0150798	.0268827	.0424246	.0615630	.0840279
4	.0000097	.0001401	.0006427	.0018415	.0040778	.0076722	.0129017	.0199863
5	.0000002	.0000069	.0000473	.0001801	.0004946	.0011168	.0021821	.0038468
6		.0000003	.0000029	.0000146	.0000503	.0001355	.0003080	.0006189
7			.0000002	.0000010	.0000044	.0000140	.0000372	.0000858
8				.0000001	.0000003	.0000013	.0000039	.0000108
9						.0000001	.0000004	.0000011
10								.0000001
11								

r/p	.009	.010
1	.6856396	.7237483
2	.3202076	.3665745
3	.1094666	.1374781
4	.0290830	.0402857
5	.0062698	.0096063
6	.0011316	.0019209
7	.0001750	.0003295
8	.0000236	.0000493
9	.0000028	.0000065
10	.0000003	.0000008
11		.0000001

n = 129

r/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1210828	.2276043	.3213038	.4037139	.4761856	.5399092	.5959333	.6451819
2	.0075889	.0279269	.0578580	.0947947	.1366276	.1816493	.2284890	.2760567
3	.0003181	.0023170	.0071242	.0153937	.0274230	.0432471	.0627135	.0855405
4	.0000100	.0001443	.0006617	.0018948	.0041918	.0078807	.0129484	.0204986
5	.0000002	.0000072	.0000491	.0001868	.0005145	.0011561	.0022571	.0038759
6		.0000003	.0000030	.0000153	.0000526	.0001414	.0003211	.0006447
7			.0000002	.0000011	.0000046	.0000148	.0000391	.0000895
8				.0000001	.0000003	.0000013	.0000041	.0000108
9						.0000001	.0000004	.0000012
10								.0000001
11								

r/p	.009	.010
1	.6884689	.7265108
2	.3214948	.3701462
3	.1115638	.1397690
4	.0298044	.0413576
5	.0064751	.0099131
6	.0011779	.0019978
7	.0001836	.0003454
8	.0000250	.0000521
9	.0000030	.0000070
10	.0000003	.0000008
11		.0000001

n = 130

r/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1219617	.2291491	.3233399	.4060991	.4788047	.5426697	.5987618	.6480205
2	.0077024	.0281263	.0586484	.0960303	.1383253	.1837928	.2310511	.2790097
3	.0003253	.0023692	.0072874	.0157113	.0279690	.0440775	.0638739	.0870446
4	.0000103	.0001487	.0006810	.0019485	.0043080	.0078929	.0125887	.0201010
5	.0000003	.0000074	.0000509	.0001936	.0005329	.0011963	.0023340	.0041081
6		.0000003	.0000032	.0000160	.0000549	.0001475	.0003347	.0006714
7			.0000002	.0000011	.0000048	.0000155	.0000411	.0000940
8				.0000001	.0000003	.0000014	.0000044	.0000118
9						.0000001	.0000004	.0000012
10								.0000001
11								

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$$P(o, n, b) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

$\frac{o}{p}$.009	.010
1	.4912727	.7892457
2	.3867813	.3737098
3	.1132784	.1480728
4	.0305404	.0482427
5	.0046851	.0102265
6	.0012255	.0020769
7	.0001986	.0003619
8	.0000264	.0000551
9	.0000038	.0000074
10	.0000003	.0000009
11		.0000001

$\frac{o}{p}$	.001	.002	.003	.004	.005	.006	.007	.008
1	.1228397	.2305908	.3253699	.4084747	.4814107	.5454137	.6015704	.6508363
2	.0078167	.0287279	.0594424	.0972706	.1400277	.1859521	.2336350	.2819618
3	.0003327	.0024201	.0074306	.0160386	.0285208	.0449168	.0650448	.0886008
4	.0000196	.0001531	.0007008	.0020035	.0044243	.0083088	.0139407	.0215473
5	.0000003	.0000077	.0000528	.0002066	.0005518	.0012379	.0024128	.042434
6		.0000003	.0000033	.0000167	.0000573	.0001537	.0003487	.0006989
7			.0000002	.0000012	.0000051	.0000141	.0000431	.0000986
8				.0000001	.0000004	.0000015	.0000046	.0000121
9					.0000001	.0000004	.0000013	.0000033
10						.0000001	.0000004	.0000013
11							.0000001	.0000001

$\frac{o}{p}$	.009	.010
1	.4940512	.7319533
2	.3300617	.3772652
3	.1151940	.1443892
4	.0312850	.0432410
5	.0068998	.0105467
6	.0012747	.0021584
7	.0002019	.0003791
8	.0000279	.0000581
9	.0000034	.0000079
10	.0000004	.0000010
11		.0000001

$\frac{o}{p}$	.001	.002	.003	.004	.005	.006	.007	.008
1	.1237169	.2382294	.3273938	.4108408	.4840036	.5481412	.6043594	.6536296
2	.0079317	.0291318	.0502402	.0785154	.1173347	.1681088	.2262405	.2849128
3	.0003402	.0024727	.0075866	.0161573	.0290783	.0457820	.0682344	.0901471
4	.0000109	.0001576	.0007210	.0020597	.0045468	.0085283	.0139244	.0208338
5	.0000003	.0000080	.0000548	.0002078	.0005712	.0012803	.0024932	.0043618
6		.0000003	.0000035	.0000174	.0000597	.0001603	.0003631	.0007272
7			.0000002	.0000012	.0000053	.0000171	.0000452	.0001034
8				.0000001	.0000004	.0000016	.0000049	.0000128
9					.0000001	.0000004	.0000013	.0000034
10						.0000001	.0000004	.0000014
11							.0000001	.0000001

$\frac{o}{p}$	.009	.010
1	.4968048	.7344330
2	.3333376	.3808121
3	.1171278	.1467181
4	.0320402	.0448525
5	.0071192	.0108736
6	.0013253	.0022423
7	.0002115	.0003969
8	.0000298	.0000614
9	.0000034	.0000084
10	.0000004	.0000010
11		.0000001

$$F(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 133

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1245032	.2337650	.3294116	.4131974	.4865836	.5508524	.6071289	.6564005
2	.0030475	.0295380	.0610417	.0997647	.1434460	.1902690	.2387876	.2878625
3	.0003470	.0025260	.0077445	.0166862	.0296416	.0466161	.0674143	.0917052
4	.0000112	.0001623	.0007410	.0021148	.0048694	.0087519	.0146619	.0236283
5	.0000003	.0000083	.0000568	.0002152	.0005910	.0013238	.0025761	.0045234
6		.0000004	.0000036	.0000182	.0000623	.0001670	.0003780	.0007564
7			.0000002	.0000013	.0000056	.0000180	.0000475	.0001084
8				.0000001	.0000004	.0000017	.0000052	.0000135
9						.0000001	.0000005	.0000015
10								.0000001
11								

c/p	.009	.010
1	.6995335	.7372874
2	.3366088	.3843503
3	.1190737	.1490589
4	.0328660	.0452772
5	.0073435	.0112074
6	.0013775	.0023286
7	.0002216	.0004153
8	.0000311	.0000647
9	.0000039	.0000089
10	.0000004	.0000011
11		.0000001

n = 134

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1254684	.2352975	.3314233	.4155446	.4891507	.5535472	.6098790	.6591494
2	.0081641	.0299465	.0618468	.1010185	.1451617	.1924325	.2413660	.2908108
3	.0003555	.0025801	.0079044	.0170185	.0302106	.0474780	.0684139	.0933744
4	.0000116	.0001670	.0008626	.0021751	.0047943	.0089791	.0150311	.0231809
5	.0000003	.0000086	.0000588	.0002220	.0006114	.0013683	.0026607	.0046683
6		.0000004	.0000038	.0000190	.0000649	.0001739	.0003934	.0007866
7			.0000002	.0000014	.0000059	.0000189	.0000498	.0001084
8				.0000001	.0000005	.0000018	.0000058	.0000143
9						.0000001	.0000005	.0000016
10								.0000001
11								

c/p	.009	.010
1	.7022377	.7392145
2	.3398751	.3878797
3	.1210315	.1514118
4	.0335024	.0463150
5	.0075727	.0115481
6	.0014211	.0024174
7	.0002320	.0004345
8	.0000328	.0000682
9	.0000041	.0000095
10	.0000005	.0000012
11		.0000001

n = 135

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1253431	.2368269	.3334291	.4178825	.4917049	.5562266	.6126099	.6618752
2	.0083814	.0303572	.0623555	.1023766	.1468816	.1945992	.2439456	.2937575
3	.0003633	.0026348	.0080863	.0173545	.0307854	.0483478	.0698231	.0948547
4	.0000119	.0001718	.0007840	.0022345	.0049214	.0092101	.0154062	.0237416
5	.0000003	.0000089	.0000609	.0002306	.0006324	.0014140	.0027473	.0048164
6		.0000004	.0000039	.0000198	.0000677	.0001811	.0004093	.00086176
7			.0000002	.0000015	.0000062	.0000198	.0000522	.0001149
8				.0000001	.0000005	.0000019	.0000058	.0000151
9						.0000002	.0000006	.0000017
10							.0000001	.0000001
11								

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$$P(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

c/p	.009	.010
1	.7049174	.7485154
2	.3431364	.3914000
3	.1230011	.1537765
4	.0343694	.0473659
5	.0078048	.0118958
6	.0014864	.0025087
7	.0002428	.0004543
8	.0000346	.0000719
9	.0000044	.0000101
10	.0000005	.0000013
11	.0000001	.0000001

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1272168	.2383532	.3354288	.4202109	.4942464	.5568886	.6153216	.6645812
2	.0083994	.0307701	.0674678	.1035390	.1486050	.1967690	.2465262	.2967025
3	.0003712	.0026902	.0082300	.0176942	.0313658	.0492253	.0710420	.0964459
4	.0000123	.0001767	.0008059	.0022950	.0050507	.0094449	.0157871	.0243105
5	.0000003	.0000093	.0000631	.0002387	.0006538	.0014608	.0028359	.0049678
6		.0000004	.0000041	.0000206	.0000705	.0001885	.0004257	.0008496
7			.0000002	.0000015	.0000065	.0000208	.0000547	.0001245
8				.0000001	.0000005	.0000020	.0000061	.0000159
9						.0000002	.0000006	.0000014
10							.0000001	.0000002
11								

n = 136

c/p	.009	.010
1	.7075733	.7450908
2	.3163524	.3949112
3	.1249823	.1541527
4	.0351671	.0484301
5	.0080458	.0122505
6	.0015433	.0026026
7	.0002540	.0004748
8	.0000365	.0000737
9	.0000046	.0000107
10	.0000005	.0000014
11	.0000001	.0000002

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1280895	.2398765	.3374225	.4225301	.4967752	.5615353	.6180144	.6672645
2	.0085182	.0311853	.0642837	.1048057	.1503340	.1999417	.2491070	.2964458
3	.0003702	.0027464	.0083287	.0180376	.0319520	.0501105	.0728704	.0980420
4	.0000186	.0001818	.0008282	.0023546	.0051823	.0096836	.0161739	.0249876
5	.0000003	.0000096	.0000653	.0002449	.0006758	.0015087	.0029264	.0049125
6		.0000004	.0000043	.0000215	.0000734	.0001961	.0004425	.0008826
7			.0000002	.0000016	.0000068	.0000218	.0000573	.0001303
8				.0000001	.0000006	.0000021	.0000065	.0000168
9						.0000002	.0000006	.0000019
10							.0000001	.0000002
11								

n = 137

c/p	.009	.010
1	.7102081	.7476393
2	.3496430	.3964130
3	.1289750	.1585403
4	.0359758	.0488073
5	.0088899	.0124183
6	.0016018	.0026291
7	.0002658	.0004941
8	.0000384	.0000797
9	.0000049	.0000111
10	.0000004	.0000014
11	.0000001	.0000002

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 138

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1289615	.2413968	.3394102	.4248400	.4992213	.5641661	.6206883	.6699284
2	.0086374	.0316027	.0651031	.1060766	.1520642	.2011173	.2516901	.3025853
3	.0003074	.0028033	.0085634	.0183846	.0325439	.0510035	.0735082	.0996608
4	.0000130	.0001869	.0008509	.0024193	.0053161	.0099261	.0165666	.0254729
5	.0000003	.0000099	.0000676	.0002583	.0006983	.0015577	.0030193	.0052806
6		.0000004	.0000045	.0000224	.0000764	.0002040	.0004599	.0009165
7			.0000003	.0000017	.0000071	.0000228	.0000600	.0001363
8				.0000003	.0000006	.0000022	.0000068	.0000177
9						.0000002	.0000007	.0000020
10							.0000001	.0000002
11								

c/p	.009	.010
1	.7128133	.7501629
2	.3528881	.4019052
3	.1289790	.1609390
4	.0367945	.0508976
5	.0085391	.0129812
6	.0016620	.0027982
7	.0002776	.0008182
8	.0000405	.0000839
9	.0000052	.0000120
10	.0000006	.0000015
11	.0000001	.0000002

n = 139

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1298325	.2429140	.3413920	.4271406	.5017948	.5667811	.6233434	.6725670
2	.0087581	.0320223	.0659261	.1073516	.1538023	.2032958	.2542731	.3055252
3	.0003956	.0028609	.0087330	.0187354	.0331416	.0519042	.0747558	.1012642
4	.0000134	.0001921	.0008740	.0024832	.0054522	.0101726	.0164652	.0250664
5	.0000004	.0000103	.0000700	.0002640	.0007214	.0016080	.0031141	.0054422
6		.0000005	.0000047	.0000233	.0000795	.0002121	.0004778	.0009514
7			.0000003	.0000018	.0000075	.0000239	.0000628	.0001424
8				.0000001	.0000006	.0000024	.0000072	.0000187
9						.0000002	.0000007	.0000022
10							.0000001	.0000002
11								

c/p	.009	.010
1	.7153980	.7526613
2	.3561274	.4053878
3	.1309242	.1633487
4	.0376241	.0517010
5	.0087934	.0133874
6	.0017239	.0029000
7	.0002900	.0005410
8	.0000424	.0000882
9	.0000055	.0000127
10	.0000006	.0000017
11	.0000001	.0000002

n = 140

c/p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1307027	.2444281	.3433678	.4294320	.5042859	.5693804	.6259800	.6751865
2	.0088778	.0324440	.0667585	.1086308	.1555422	.2054765	.2568566	.3084615
3	.0004040	.0029192	.0089046	.0190899	.0337449	.0528126	.0760121	.1029181
4	.0000138	.0001975	.0008976	.0025482	.0055907	.0104230	.0173697	.0266681
5	.0000004	.0000107	.0000724	.0002729	.0007451	.0016593	.0032111	.0054078
6		.0000005	.0000048	.0000243	.0000827	.0002205	.0004963	.0009873
7			.0000003	.0000018	.0000079	.0000251	.0000657	.0001491
8				.0000001	.0000006	.0000025	.0000076	.0000196
9						.0000002	.0000008	.0000023
10							.0000001	.0000002
11								

$$F(c, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

%p	.009	.010
1	.7179594	.7531347
2	.3593439	.4088605
3	.1330204	.1687691
4	.0364645	.0528175
5	.0090589	.0137408
6	.0017875	.0030046
7	.0003029	.0005645
8	.0000448	.0000927
9	.0000053	.0000135
10	.0000007	.0000018
11	.0000001	.0000003

								n = 141
%p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1315720	.2459193	.3453377	.4317143	.5067644	.5719641	.6285982	.6777650
2	.0090010	.0328680	.0675823	.1099140	.1572860	.2076599	.2594406	.3113953
3	.0004185	.0089783	.0090782	.0191480	.0343538	.0537285	.0772780	.1045625
4	.0000141	.0002029	.0009216	.0026143	.0057315	.0106773	.0177802	.0272781
5	.0000004	.0000110	.0000749	.0002820	.0007693	.0017119	.0033102	.0057756
6		.0000005	.0000051	.0000253	.0000860	.0002291	.0005153	.0010843
7			.0000003	.0000019	.0000082	.0000262	.0000647	.0001558
8				.0000001	.0000007	.0000026	.0000080	.0000207
9					.0000001	.0000002	.0000008	.0000024
10						.0000001	.0000001	.0000003
11								

%p	.009	.010
1	.7804978	.7575834
2	.3625882	.4183233
3	.1350575	.1688000
4	.0393155	.0839470
5	.0093176	.0141316
6	.0018589	.0031120
7	.0003143	.0005889
8	.0000478	.0000974
9	.0000062	.0000143
10	.0000007	.0000019
11	.0000001	.0000002

								n = 142
%p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1324404	.2474474	.3473017	.4339875	.5092306	.5745323	.6311980	.6803627
2	.0091254	.0332942	.0684156	.1112012	.1590334	.2098457	.2628046	.3143864
3	.0004821	.0090380	.0092537	.0198099	.0349685	.0546521	.0785332	.1062171
4	.0000145	.0002085	.0009461	.0026817	.0058746	.0109356	.0181967	.0278964
5	.0000004	.0000114	.0000774	.0002913	.0007911	.0017637	.0034115	.0059477
6		.0000005	.0000053	.0000263	.0000895	.0002380	.0005349	.0010623
7			.0000003	.0000020	.0000086	.0000275	.0000718	.0001427
8				.0000001	.0000007	.0000028	.0000084	.0000214
9					.0000001	.0000002	.0000009	.0000026
10						.0000001	.0000001	.0000003
11								

%p	.009	.010
1	.7830133	.7600075
2	.3688094	.4157739
3	.1371052	.1708418
4	.0401791	.0850895
5	.0093876	.0148897
6	.0019801	.0032882
7	.0003301	.0006143
8	.0000496	.0001084
9	.0000066	.0000181
10	.0000008	.0000020
11	.0000001	.0000002

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

n = 143

p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1333079	.2489525	.3492590	.4363515	.5116045	.5770851	.6337796	.6829190
2	.0092469	.0337225	.0692522	.1124923	.1607043	.2120338	.2664008	.3172547
3	.0004298	.0030985	.0094312	.0201755	.0355088	.0555033	.0798375	.1070820
4	.0000149	.0002141	.0009710	.0037502	.0060200	.0111979	.0186192	.0285330
5	.0000004	.0000118	.0000600	.0003000	.0008105	.0018207	.0035150	.0061233
6		.0000005	.0000055	.0000274	.0000930	.0002473	.0005550	.0011014
7			.0000003	.0000021	.0000090	.0000287	.0000751	.0001694
8				.0000001	.0000008	.0000029	.0000089	.0000228
9					.0000001	.0000003	.0000009	.0000027
10						.0000001	.0000001	.0000003
11								

p	.009	.010
1	.7255062	.7684074
2	.3690243	.4193182
3	.1391634	.1730926
4	.0410498	.0568451
5	.0096629	.0149353
6	.0019891	.0033352
7	.0003444	.0006403
8	.0000521	.0001075
9	.0000070	.0000160
10	.0000008	.0000021
11	.0000001	.0000003

n = 144

p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1341748	.2504246	.3512120	.4385065	.5141260	.5796226	.6363431	.6854564
2	.0093710	.0341529	.0700922	.1137874	.1625398	.2142241	.2671930	.3201801
3	.0004386	.0031598	.0094106	.0203447	.0362148	.0565220	.0811302	.1095570
4	.0000154	.0002199	.0009964	.0038199	.0061679	.0114642	.0190477	.0291579
5	.0000004	.0000122	.0000627	.0003106	.0008455	.0018770	.0036207	.0063025
6		.0000006	.0000057	.0000285	.0000966	.0002566	.0005757	.0011416
7			.0000003	.0000022	.0000094	.0000284	.0000784	.0001774
8				.0000002	.0000008	.0000031	.0000093	.0000241
9					.0000001	.0000003	.0000010	.0000029
10						.0000001	.0000001	.0000003
11								

p	.009	.010
1	.7279744	.7647834
2	.3722386	.4286501
3	.1412383	.1755538
4	.0419385	.0574133
5	.0101436	.0153484
6	.0020600	.0034512
7	.0003592	.0006672
8	.0000548	.0001128
9	.0000074	.0000169
10	.0000009	.0000023
11	.0000001	.0000003

n = 145

p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1350405	.2519537	.3531584	.4407325	.5165554	.5821449	.6388887	.6879728
2	.0094950	.0345855	.0709356	.1150862	.1642968	.2164165	.2697770	.3231023
3	.0004475	.0032218	.0097921	.0209177	.0368464	.0574682	.0824333	.1112420
4	.0000158	.0002258	.0010222	.0038908	.0063181	.0117346	.0194823	.0298010
5	.0000004	.0000126	.0000654	.0003207	.0008721	.0019345	.0037887	.0064853
6		.0000006	.0000059	.0000296	.0001004	.0002663	.0005970	.0011828
7			.0000004	.0000023	.0000099	.0000314	.0000781	.0001851
8				.0000002	.0000008	.0000032	.0000096	.0000253
9					.0000001	.0000003	.0000010	.0000027
10						.0000001	.0000001	.0000003
11								

$$P(n, r, p) = \sum_{k=0}^n \binom{n}{k} p^k (1-p)^{n-k}$$

$n \backslash p$	.009	.010
1	.7304248	.7671355
2	.3754343	.4260714
3	.1433113	.1780248
4	.0428262	.0585249
5	.0104297	.0157492
6	.0021327	.0035708
7	.0003746	.0006950
8	.0000575	.0001184
9	.0000078	.0000179
10	.0000010	.0000024
11	.0000001	.0000003

$n \backslash p$	.001	.002	.003	.004	.005	.006	.007	.008
1	.1359034	.2534498	.3550989	.4429898	.5169736	.5846520	.6414165	.6904690
2	.0096213	.0350203	.0717823	.1163889	.1660581	.2186109	.2723608	.3260812
3	.0004566	.0038845	.0099755	.0213944	.0374837	.0584319	.0837447	.1129368
4	.0000162	.0002118	.0010485	.0029629	.0064708	.0120090	.0194230	.0304526
5	.0000005	.0000131	.0000882	.0003310	.0008993	.0019933	.0038390	.0066710
6		.0000006	.0000063	.0000308	.0001042	.0002764	.0006189	.0012853
7			.0000004	.0000024	.0000103	.0000328	.0000855	.0001931
8				.0000002	.0000009	.0000034	.0000103	.0000266
9					.0000001	.0000001	.0000001	.0000002
10							.0000001	.0000000
11								.0000000

$n \backslash p$	.009	.010
1	.7328810	.7694642
2	.3786892	.4294821
3	.1454004	.1805033
4	.0437304	.0597892
5	.0107812	.0161973
6	.0022074	.0036922
7	.0003904	.0007238
8	.0000603	.0001241
9	.0000083	.0000189
10	.0000010	.0000024
11	.0000001	.0000003

$n \backslash p$	.001	.002	.003	.004	.005	.006	.007	.008
1	.1367695	.2549429	.3572036	.4452175	.5213778	.5871441	.6439266	.6929453
2	.0097476	.0354571	.0726322	.1176983	.1678286	.2208072	.2744442	.3289368
3	.0004637	.0033480	.0091609	.0214747	.0381265	.0593830	.0850650	.1146418
4	.0000167	.0003379	.0010753	.0029342	.0064258	.0122875	.0203697	.0311194
5	.0000005	.0000135	.0000811	.0003415	.0008272	.0019053	.0034814	.0066621
6		.0000006	.0000064	.0000320	.0001082	.0002867	.0006415	.0012688
7			.0000004	.0000026	.0000108	.0000343	.0000893	.0002013
8				.0000002	.0000009	.0000036	.0000108	.0000275
9					.0000001	.0000001	.0000001	.0000002
10							.0000001	.0000000
11								.0000000

$n \backslash p$	.009	.010
1	.7352853	.7717495
2	.3818172	.4328819
3	.1474995	.1839930
4	.0448456	.0609964
5	.0110103	.0166333
6	.0022840	.0038172
7	.0004067	.0007335
8	.0000633	.0001301
9	.0000087	.0000189
10	.0000011	.0000027
11	.0000001	.0000003

$$P(c, n, p) = \sum_{r=c}^n \binom{n}{r} p^r (1-p)^{n-r}$$

c \ p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1376327	.2564330	.3589825	.4474366	.5237709	.5896212	.6464191	.6954017
2	.0098744	.0358961	.0734854	.1190854	.1695904	.2230052	.2775271	.3318489
3	.0004750	.0034122	.0103483	.0220588	.0387750	.0603516	.0863942	.1163559
4	.0000171	.0002441	.0011026	.0031108	.0067833	.0125700	.0208226	.0317807
5	.0000005	.0000139	.0000941	.0003523	.0009557	.0021148	.0042665	.0070561
6		.0000007	.0000067	.0000332	.0001123	.0002973	.0006647	.0013136
7			.0000004	.0000027	.0000113	.0000358	.0000931	.0002098
8				.0000002	.0000010	.0000038	.0000114	.0000293
9					.0000001	.0000003	.0000012	.0000036
10						.0000000	.0000001	.0000004
11								

c \ p	.009	.010
1	.7376386	.7740518
2	.1849982	.4362708
3	.1406084	.1854939
4	.0455713	.0622164
5	.0113210	.0170769
6	.0023626	.0039454
7	.0004238	.0007841
8	.0000664	.0001364
9	.0000092	.0000210
10	.0000011	.0000029
11	.0000001	.0000004

c \ p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1384951	.2574201	.3608856	.4496469	.5261520	.5820835	.6488942	.6978385
2	.0100024	.0363372	.0743419	.1203191	.1713613	.2252049	.2801093	.3347573
3	.0004844	.0034772	.0105377	.0224465	.0394291	.0613275	.0877321	.1180798
4	.0000176	.0002504	.0011303	.0031865	.0069433	.0124567	.0212816	.0324573
5	.0000005	.0000144	.0000971	.0003633	.0009848	.0021776	.0041838	.0072539
6		.0000007	.0000069	.0000345	.0001165	.0003084	.0006885	.0013555
7			.0000004	.0000028	.0000118	.0000373	.0000971	.0002187
8				.0000002	.0000010	.0000039	.0000120	.0000307
9					.0000001	.0000004	.0000013	.0000038
10						.0000000	.0000001	.0000004
11								

c \ p	.009	.010
1	.7399993	.7763113
2	.1831719	.4396486
3	.1517269	.1880017
4	.0465076	.0634492
5	.0116292	.0175283
6	.0024433	.0040767
7	.0004411	.0008157
8	.0000696	.0001429
9	.0000097	.0000222
10	.0000012	.0000031
11	.0000001	.0000004

c \ p	.001	.002	.003	.004	.005	.006	.007	.008
1	.1393566	.2594043	.3628030	.4518483	.5285213	.5945310	.6513519	.7002538
2	.0101309	.0367803	.0752015	.1216364	.1731353	.2374061	.2826908	.3376680
3	.0004939	.0035429	.0107301	.0228881	.0390888	.0623108	.0890788	.1198133
4	.0000180	.0002565	.0011585	.0032636	.0071057	.0131476	.0217467	.0331423
5	.0000005	.0000149	.0001002	.0003746	.0010146	.0022416	.0043035	.0073555
6		.0000007	.0000072	.0000359	.0001209	.0003194	.0006712	.0014067
7			.0000004	.0000029	.0000125	.0000390	.0001013	.0002378
8				.0000002	.0000011	.0000041	.0000126	.0000322
9					.0000001	.0000004	.0000014	.0000040
10						.0000000	.0000001	.0000005
11								

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$$P(o, n, p) = \sum_{r=0}^n \binom{n}{r} p^r (1-p)^{n-r}$$

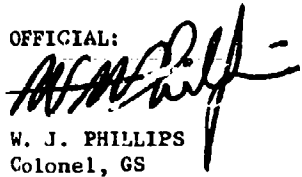
$\frac{o}{n}$	p	.009	.010
1		.7423393	.7765482
2		.3913384	.4430152
3		.1538549	.1905181
4		.0474546	.0646947
5		.0119431	.0179875
6		.0025259	.0042112
7		.0004591	.0008483
8		.0000730	.0001496
9		.0000103	.0000234
10		.0000013	.0000033
11		.0000001	.0000004

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